

LIEBHERR

CONSTRUCTION EQUIPMENT



[(365672)] LIEBHERR LH50M 135585-1216 - Hydraulic System

Sample No: LH0223048

Oil Type: ESSO UNIVIS EXTRA



Weyerhaeuser
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 CA P9N 3X8
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Sample Information

Sample Number	LH0223048	LH0223036	LH0223024	LH0223012
Sample Date	25 Oct 2022	25 Aug 2022	27 Jun 2022	04 May 2022
Machine Hours	9976	3930	2996	2003
Oil Hours	0	0	0	0
Oil Changed	Not Changd	Not Changd	Not Changd	Not Changd
Sample Status	ABNORMAL	ABNORMAL	ABNORMAL	ABNORMAL



Oil Condition

Visc @ 40°C	cSt	26.3	27.1	27.5	28.6
Acid Number (AN)	mg KOH/g	0.47	0.47	0.72	0.81



Contamination

Water	%	0.011	NEG	NEG	NEG
Particles >4µm		5925	25288	1910	945
Particles >6µm		1589	6859	549	254
Particles >14µm		80	386	27	31
ISO 4406:1999 (c)		20/18/13	22/20/16	18/16/12	17/15/12
Silicon	ppm	<1	<1	<1	<1
Sodium	ppm	<1	<1	<1	<1
Potassium	ppm	<1	<1	0	<1



Wear Metals

Iron	ppm	9	7	8	7
Copper	ppm	2	2	2	1
Lead	ppm	<1	<1	<1	<1
Tin	ppm	0	0	0	0
Aluminum	ppm	<1	<1	0	0
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	0	0	0	<1
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	<1	0	0
Manganese	ppm	<1	<1	<1	0
Vanadium	ppm	0	0	0	0



Additives

Calcium	ppm	220	233	297	323
Magnesium	ppm	<1	1	1	1
Zinc	ppm	481	486	514	536
Phosphorus	ppm	418	387	410	449
Barium	ppm	0	0	0	0
Boron	ppm	<1	<1	<1	<1

Diagnosis

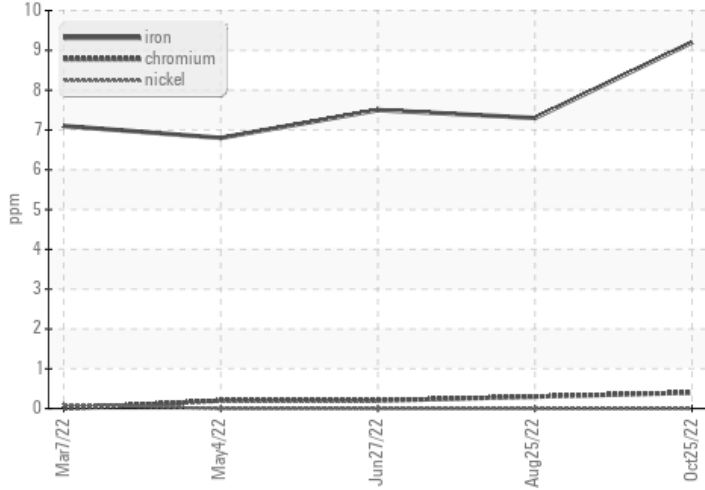
Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable. Viscosity of sample indicates oil is within ISO 22 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Depot: WEY100KEN
Unique No: 5477249
Signed: Kevin Marson
Report Date: 03 Nov 2022

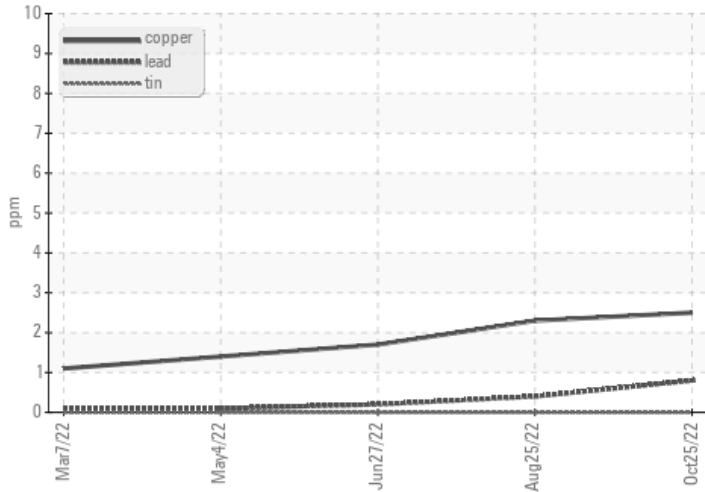


Graphs

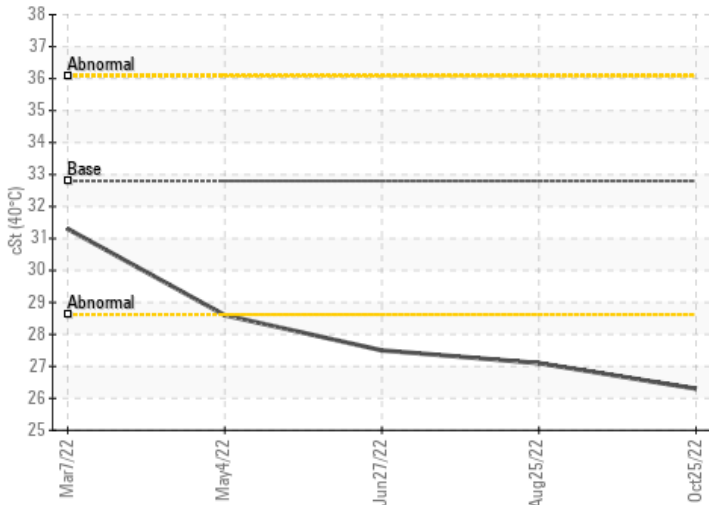
Ferrous Alloys



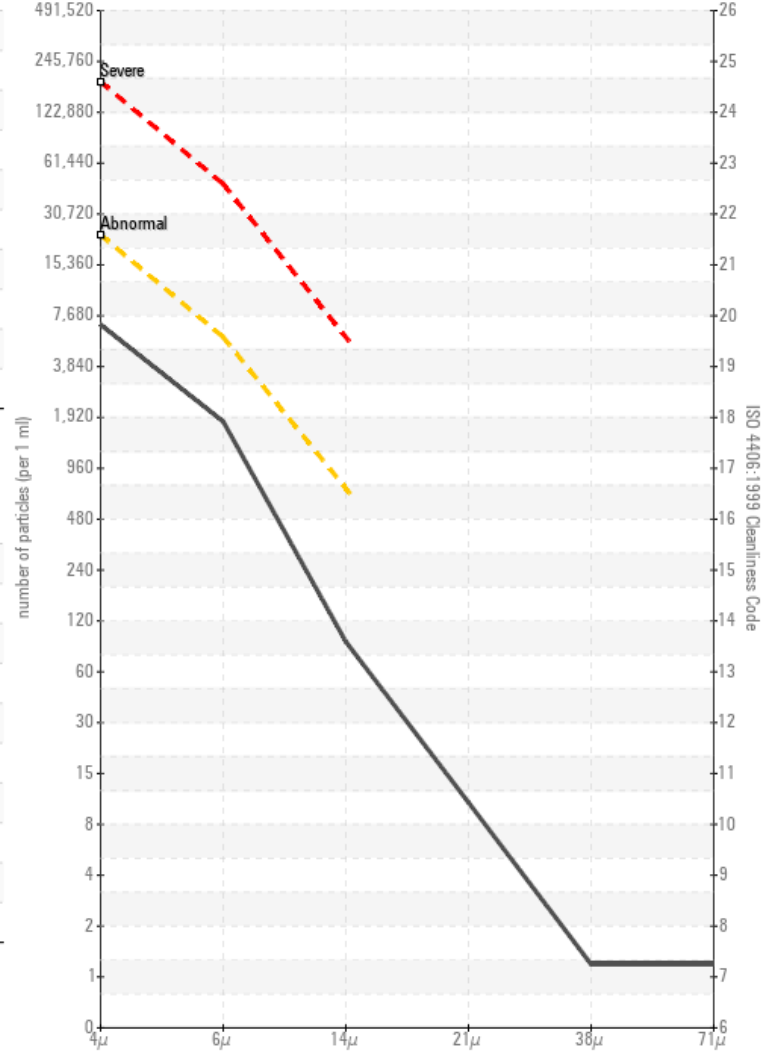
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

