

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH30M 121854-1253 - Swing Drive

Sample No: LH0272744

Oil Type: CHEVRON DELO GEAR ESI OIL 80W90



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SAMPLE INFORMATION

Sample Number	LH0272744	LH0264393	LH0236120	LH0220803
Sample Date	02 Jan 2024	04 Aug 2023	20 Jan 2023	05 Dec 2022
Machine Hours	6976	6007	1172	3974
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	ABNORMAL	NORMAL	NORMAL



OIL CONDITION

Visc @ 40°C	cSt	46.9	134	142	142
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CONTAMINATION

Water	%	0.872	NEG	NEG	NEG
Silicon	ppm	11	5	1	2
Sodium	ppm	<1	1	<1	<1
Potassium	ppm	0	3	2	3



WEAR METALS

Iron	ppm	36	852	57	367
Copper	ppm	4	162	57	61
Lead	ppm	<1	<1	0	<1
Tin	ppm	0	5	2	2
Aluminum	ppm	0	1	0	3
Chromium	ppm	0	7	<1	3
Molybdenum	ppm	0	<1	<1	<1
Nickel	ppm	0	<1	0	<1
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	6	<1	3
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	3605	38	43	45
Magnesium	ppm	19	5	4	6
Zinc	ppm	1474	75	44	33
Phosphorus	ppm	1099	1053	1240	688
Barium	ppm	0	0	0	0
Boron	ppm	114	14	9	14

Diagnosis

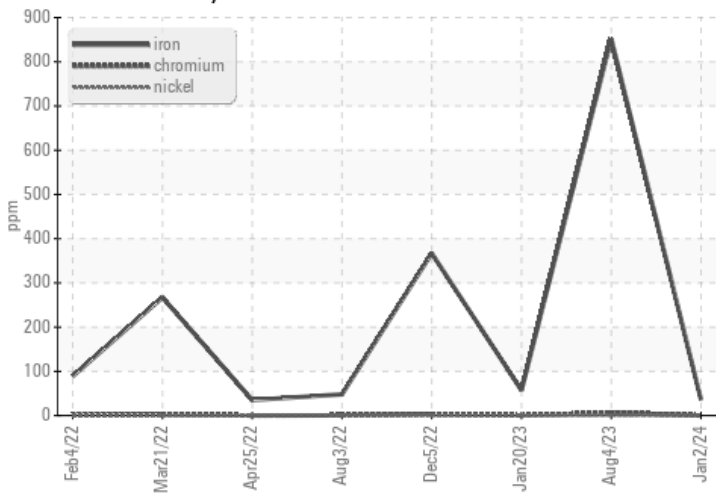
We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate concentration of water present in the oil. The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

Depot: LEC0008
 Unique No: 10830291
 Signed: Don Baldrige
 Report Date: 15 Jan 2024

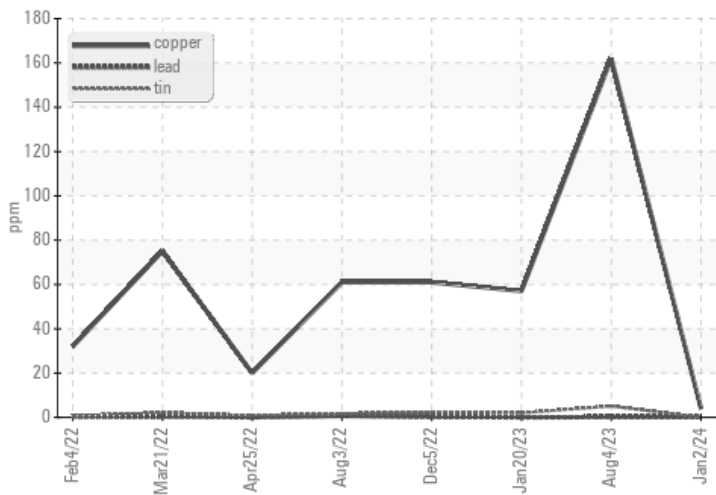


GRAPHS

Ferrous Alloys



Non-ferrous Metals



● Viscosity @ 40°C

