

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR A924C063248-1049 - Swing Drive

Sample No: LH0244689

Oil Type: LIEBHERR GEAR BASIC 90 LS



SAMPLE INFORMATION

Sample Number	LH0244689	LHMC110709	LH0203804	LHMC124977
Sample Date	13 Jun 2023	12 Dec 2022	09 Nov 2021	11 Jan 2021
Machine Hours	14367	14026	12824	11737
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	SEVERE	SEVERE	SEVERE	ABNORMAL

DUMES INC

1640 NORTH 6TH ST

VINCENNES, IN

US 47591

Contact:



OIL CONDITION

Visc @ 40°C	cSt	197	210	217	187
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T:

F:



CONTAMINATION

Water	%	---	0.431	0.903	0.417
Silicon	ppm	1	8	5	3
Sodium	ppm	2	4	7	4
Potassium	ppm	4	10	14	1

Diagnosis

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Bearing and/or gear wear is indicated. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.



WEAR METALS

Iron	ppm	947	1962	1297	555
Copper	ppm	221	404	333	179
Lead	ppm	<1	<1	<1	0
Tin	ppm	4	4	4	0
Aluminum	ppm	<1	5	3	<1
Chromium	ppm	7	16	11	5
Molybdenum	ppm	2	5	6	<1
Nickel	ppm	0	<1	3	0
Titanium	ppm	0	<1	<1	0
Silver	ppm	0	0	0	<1
Manganese	ppm	7	15	11	6
Vanadium	ppm	0	0	<1	0



ADDITIVES

Calcium	ppm	8	16	35	23
Magnesium	ppm	5	2	2	2
Zinc	ppm	29	51	56	93
Phosphorus	ppm	2351	2448	2576	1615
Barium	ppm	0	<1	0	0
Boron	ppm	0	3	10	5

Depot: DUMVINLH

Unique No: 10536750

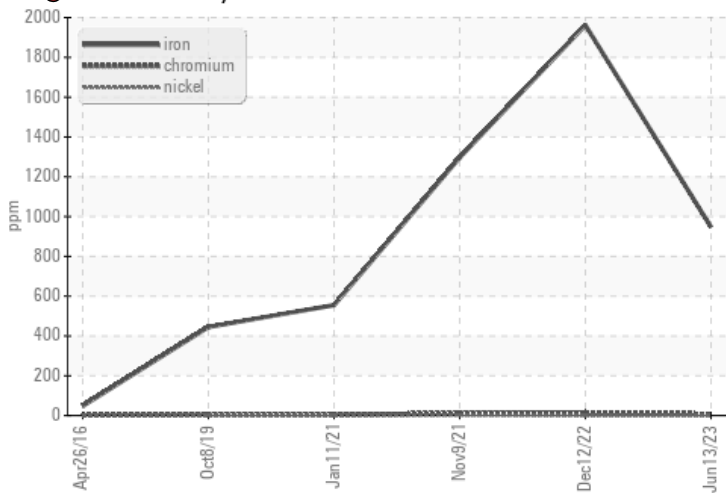
Signed: Doug Bogart

Report Date: 02 Jul 2023

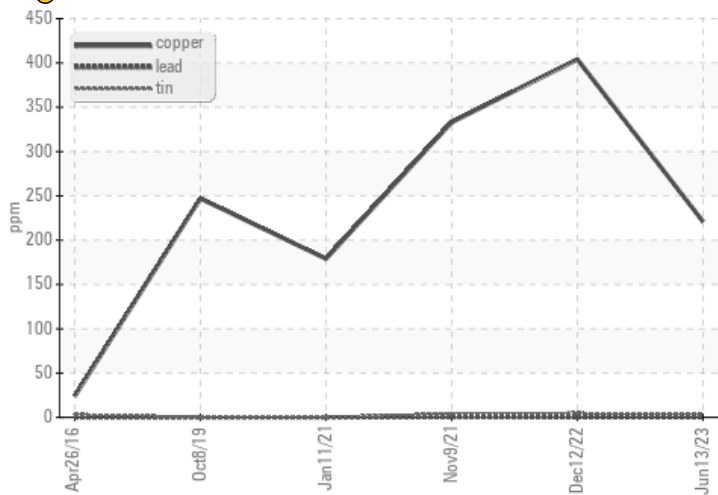


GRAPHS

● Ferrous Alloys



● Non-ferrous Metals



Viscosity @ 40°C

