

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50M 107076-1216 - Swing Drive

Sample No: LH0254690

Oil Type: LIEBHERR GEAR BASIC 90 LS



AMERICAN STATE EQUIPMENT CO.
 2400 NORTH 14TH AVENUE
 WAUSAU, WI
 US 54401
 Contact: CHRIS BARTNIK
 cbartnik@amstate.com
 T: (715)675-6900
 F: (715)675-9748



SAMPLE INFORMATION

Sample Number	LH0254690	LH0236467	LH0203893	LH0185184
Sample Date	08 Jun 2023	17 Oct 2022	20 Apr 2022	20 Oct 2021
Machine Hours	8928	9029	8173	7133
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	ABNORMAL	NORMAL	NORMAL



OIL CONDITION

Visc @ 40°C	cSt	150	210	224	223
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CONTAMINATION

Water	%	---	0.594	---	---
Silicon	ppm	2	3	3	2
Sodium	ppm	<1	4	2	2
Potassium	ppm	<1	2	<1	<1



WEAR METALS

Iron	ppm	1083	735	801	745
Copper	ppm	46	62	63	120
Lead	ppm	0	0	<1	<1
Tin	ppm	1	2	3	8
Aluminum	ppm	1	1	1	2
Chromium	ppm	11	7	7	6
Molybdenum	ppm	<1	1	<1	<1
Nickel	ppm	1	0	<1	2
Titanium	ppm	0	0	0	<1
Silver	ppm	0	0	0	2
Manganese	ppm	8	6	6	5
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	51	50	23	13
Magnesium	ppm	2	6	4	3
Zinc	ppm	8	33	22	30
Phosphorus	ppm	1325	2180	2271	2303
Barium	ppm	0	0	0	0
Boron	ppm	106	15	12	25

Diagnosis

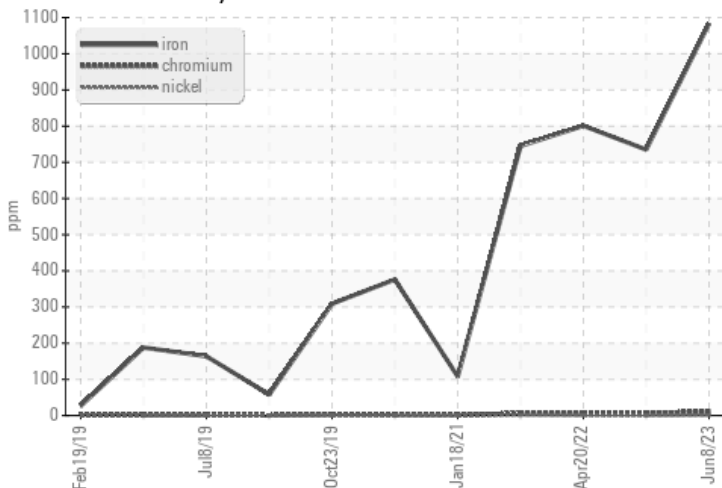
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: LEC0008
Unique No: 10535785
Signed: Don Baldrige
Report Date: 30 Jun 2023

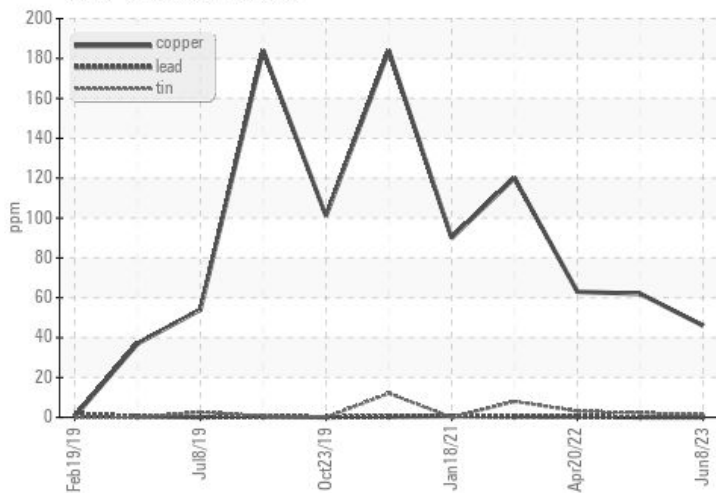


GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

