

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50 1203-77107 - Front Left Wheel Hub

Sample No: LH0254739

Oil Type: CHEVRON DELO GEAR ESI OIL 80W90



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	LH0254739	LH0254743	LH0243163	LH0229278
Sample Date	16 Jun 2023	16 Jun 2023	22 Dec 2022	31 May 2022
Machine Hours	18994	18994	17940	16365
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	N/A
Sample Status	NORMAL	ABNORMAL	NORMAL	NORMAL



OIL CONDITION

Visc @ 40°C	cSt	132	133	138	134
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CONTAMINATION

Silicon	ppm	41	20	37	21
Sodium	ppm	1	10	0	0
Potassium	ppm	3	4	4	2



WEAR METALS

Iron	ppm	66	334	89	31
Copper	ppm	<1	31	1	<1
Lead	ppm	0	0	0	0
Tin	ppm	0	0	0	<1
Aluminum	ppm	4	3	3	2
Chromium	ppm	<1	2	<1	0
Molybdenum	ppm	<1	<1	1	1
Nickel	ppm	<1	<1	0	0
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	4	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	98	46	117	108
Magnesium	ppm	11	8	14	12
Zinc	ppm	39	44	55	35
Phosphorus	ppm	880	732	850	786
Barium	ppm	0	0	0	0
Boron	ppm	25	<1	35	31

Diagnosis

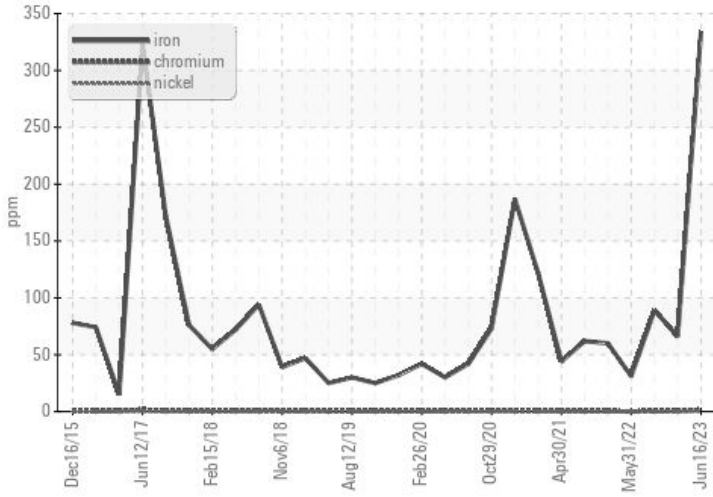
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: LEC0008
Unique No: 10535783
Signed: Don Baldrige
Report Date: 30 Jun 2023

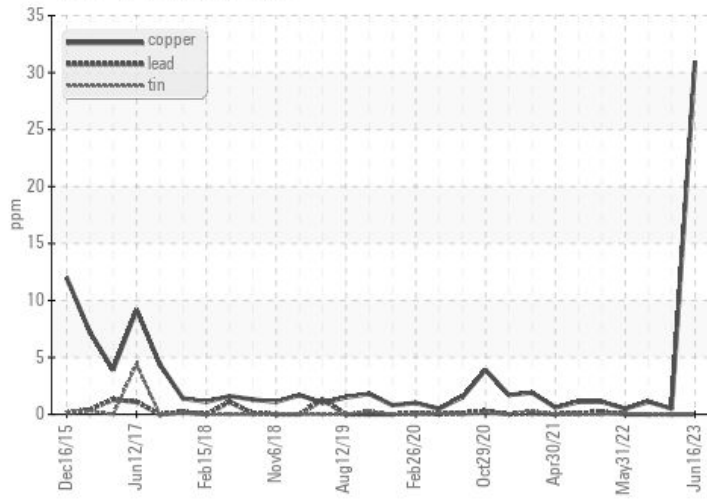


GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

