

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH50M 138442 - Front Differential

Sample No: LH0278798

Oil Type: GEAR OIL SAE 75W90



**CMI - COMBINED METAL INDUSTRIES**  
 505 GARY RAY DRIVE  
 NORTH YORK, ON  
 CA M9L 1P9  
 Contact: Greg Sacher  
 gsacher@combinedmetal.com  
 T: (416)642-7262  
 F:



#### SAMPLE INFORMATION

Sample Number	LH0278798	LH0274622	LH0251839	LH0242531
Sample Date	21 Jan 2024	20 Aug 2023	23 Mar 2023	19 Oct 2022
Machine Hours	6157	4196	2454	1200
Oil Hours	0	0	0	0
Oil Changed	Changed	N/A	N/A	Changed
Sample Status	ABNORMAL	NORMAL	NORMAL	NORMAL



#### OIL CONDITION

Visc @ 40°C	cSt	88.5	106	99.2	102



#### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	20	2	2	3
Sodium	ppm	2	<1	0	<1
Potassium	ppm	1	0	0	0



#### WEAR METALS

Iron	ppm	73	2	2	2
Copper	ppm	19	23	16	15
Lead	ppm	<1	<1	<1	<1
Tin	ppm	0	0	0	0
Aluminum	ppm	2	0	<1	0
Chromium	ppm	<1	0	0	0
Molybdenum	ppm	0	<1	0	0
Nickel	ppm	<1	<1	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	1	0	0	0
Vanadium	ppm	0	0	0	0



#### ADDITIVES

Calcium	ppm	46	17	11	15
Magnesium	ppm	2	14	3	2
Zinc	ppm	161	36	20	12
Phosphorus	ppm	1126	1332	1348	1322
Barium	ppm	0	0	0	6
Boron	ppm	208	335	310	309

#### Diagnosis

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate concentration of dirt present in the oil. The oil is no longer serviceable due to the presence of contaminants.

Depot: COMWES  
 Unique No: 5711480  
 Signed: Kevin Marson  
 Report Date: 23 Jan 2024



### GRAPHS

