

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50M 138442 - Rear Differential

Sample No: LH0274626
 Oil Type: GEAR OIL SAE 90



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	LH0274626	LH0251838	LH0242532	LH0193054
Sample Date	20 Aug 2023	23 Mar 2023	19 Oct 2022	03 Aug 2022
Machine Hours	4196	2454	1200	492
Oil Hours	0	0	0	0
Oil Changed	Changed	N/A	Changed	Changed
Sample Status	NORMAL	ABNORMAL	NORMAL	ABNORMAL



OIL CONDITION

Visc @ 40°C	cSt	105	98.0	108	140
-------------	-----	-----	------	-----	-----



CONTAMINATION

Silicon	ppm	19	27	8	9
Sodium	ppm	<1	1	2	2
Potassium	ppm	0	<1	1	1



WEAR METALS

PQ		---	---	---	0
Iron	ppm	12	35	92	241
Copper	ppm	20	25	27	20
Lead	ppm	<1	<1	1	<1
Tin	ppm	0	0	0	0
Aluminum	ppm	2	2	<1	<1
Chromium	ppm	0	0	<1	1
Molybdenum	ppm	0	0	<1	<1
Nickel	ppm	<1	0	<1	<1
Titanium	ppm	0	<1	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	2	3
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	14	43	40	31
Magnesium	ppm	2	4	2	<1
Zinc	ppm	22	51	26	33
Phosphorus	ppm	1322	1350	1368	1309
Barium	ppm	0	0	0	<1
Boron	ppm	326	289	228	4

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: COMWES
 Unique No: 5630308
 Signed: Wes Davis
 Report Date: 21 Aug 2023



GRAPHS

