

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR 24459 -Rear Right Final Drive

Sample No: LH0220496

Oil Type: LIEBHERR HYPOID 85W-140 EP



#### SAMPLE INFORMATION

Sample Number	LH0220496	LH0220498	LH0220484	---
Sample Date	19 Jun 2023	28 Apr 2023	23 Mar 2023	---
Machine Hours	1526	936	464	---
Oil Hours	1026	472	464	---
Oil Changed	Not Changd	Not Changd	Changed	---
Sample Status	NORMAL	NORMAL	NORMAL	---

**LIEBHERR MINING EQUIPMENT CO**  
 5800 S DOUGLAS HWY  
 GILLETTE, WY  
 US 82718  
 Contact: TED PILZ  
 ted.pilz@liebherr.com  
 T: (775)388-0663  
 F:



#### OIL CONDITION

Visc @ 40°C	cSt	362	363	332	---
-------------	-----	-----	-----	-----	-----



#### CONTAMINATION

Silicon	ppm	11	12	2	---
Sodium	ppm	2	2	3	---
Potassium	ppm	1	2	<1	---

#### 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.



#### WEAR METALS

Iron	ppm	81	62	80	---
Copper	ppm	<1	0	1	---
Lead	ppm	0	0	0	---
Tin	ppm	0	0	0	---
Aluminum	ppm	<1	<1	<1	---
Chromium	ppm	<1	0	<1	---
Molybdenum	ppm	<1	0	1	---
Nickel	ppm	<1	0	0	---
Titanium	ppm	0	0	<1	---
Silver	ppm	0	0	0	---
Manganese	ppm	1	<1	2	---
Vanadium	ppm	0	0	0	---



#### ADDITIVES

Calcium	ppm	13	8	26	---
Magnesium	ppm	2	2	4	---
Zinc	ppm	29	11	48	---
Phosphorus	ppm	1368	1240	1029	---
Barium	ppm	0	0	0	---
Boron	ppm	0	0	2	---

Depot: LIEGIL  
 Unique No: 10559592  
 Signed: Jonathan Hester  
 Report Date: 17 Jul 2023



### GRAPHS

