

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### 113718-1216 - Front Differential

Sample No: LH0279266

Oil Type: LIEBHERR GEAR BASIC 90 LS



#### SAMPLE INFORMATION

Sample Number	LH0279266	LH0234884	LH0203489	LH
Sample Date	16 Jan 2024	22 Jul 2022	18 Aug 2021	06 Apr 2021
Machine Hours	5998	4000	0	0
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

#### American Iron and Metal

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#### OIL CONDITION

Visc @ 40°C	cSt	99.5	192	172	95.8



#### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	3	<1	<1	3
Sodium	ppm	<1	2	6	1
Potassium	ppm	<1	10	5	0



#### WEAR METALS

Iron	ppm	3	4	1	3
Copper	ppm	14	5	4	18
Lead	ppm	<1	0	<1	<1
Tin	ppm	0	0	0	0
Aluminum	ppm	<1	<1	0	<1
Chromium	ppm	0	0	0	0
Molybdenum	ppm	0	0	0	<1
Nickel	ppm	<1	0	<1	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	<1	<1
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



#### ADDITIVES

Calcium	ppm	16	2	13	8
Magnesium	ppm	<1	<1	<1	1
Zinc	ppm	13	6	5	18
Phosphorus	ppm	2392	2301	2393	2601
Barium	ppm	0	0	<1	<1
Boron	ppm	263	1	5	291

#### Diagnosis

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Depot: BAKOTT  
Unique No: 5710849  
Signed: Wes Davis  
Report Date: 18 Jan 2024



### GRAPHS

