

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR R966 048797 - Diesel Engine

Sample No: LH

Oil Type: DIESEL ENGINE OIL SAE 10W30



#### Sample Information

Sample Number	LH	LH	---	---
Sample Date	03 May 2024	17 Apr 2023	---	---
Machine Hours	1618	1611	---	---
Oil Hours	0	0	---	---
Oil Changed	N/A	N/A	---	---
Sample Status	NORMAL	NORMAL	---	---

#### Liebherr Canada

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 Richmond, BC  
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#### Oil Condition

Visc @ 100°C	cSt	11.7	11.8	---	---
Oxidation (PA)	%	68	68	---	---



#### Contamination

Water	%	NEG	NEG	---	---
Soot %	%	0	0	---	---
Nitration (PA)	%	56	53	---	---
Sulfation (PA)	%	54	54	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	0.0	<1.0	---	---
Silicon	ppm	5	8	---	---
Sodium	ppm	4	4	---	---
Potassium	ppm	1	1	---	---

#### Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. Tests indicate that there is no fuel present in the oil. 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	6	5	---	---
Copper	ppm	5	5	---	---
Lead	ppm	0	<1	---	---
Tin	ppm	0	0	---	---
Aluminum	ppm	1	1	---	---
Chromium	ppm	0	0	---	---
Molybdenum	ppm	55	56	---	---
Nickel	ppm	0	0	---	---
Titanium	ppm	0	<1	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	<1	<1	---	---
Vanadium	ppm	0	0	---	---



#### Additives

Calcium	ppm	950	1012	---	---
Magnesium	ppm	961	1041	---	---
Zinc	ppm	1109	1151	---	---
Phosphorus	ppm	955	1092	---	---
Barium	ppm	<1	<1	---	---
Boron	ppm	58	60	---	---

Depot: LIERIC  
 Unique No: 5774963  
 Signed: Kevin Marson  
 Report Date: 08 May 2024



### Graphs

