

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [(368664)] LIEBHERR L550 062917-1756 - Diesel Engine

Sample No: LH0261510

Oil Type: DIESEL ENGINE OIL SAE 40



#### SAMPLE INFORMATION

Sample Number	LH0261510	LH0242590	---	---
Sample Date	17 May 2023	08 Nov 2022	---	---
Machine Hours	3364	2133	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ABNORMAL	NORMAL	---	---



#### OIL CONDITION

Visc @ 100°C	cSt	11.6	13.2	---	---
Oxidation (PA)	%	95	86	---	---



#### CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0.1	0	---	---
Nitration (PA)	%	93	78	---	---
Sulfation (PA)	%	65	59	---	---
Glycol	%	NEG	0.0	---	---
Fuel	%	1.5	<1.0	---	---
Silicon	ppm	11	8	---	---
Sodium	ppm	4	3	---	---
Potassium	ppm	14	15	---	---



#### WEAR METALS

Iron	ppm	16	11	---	---
Copper	ppm	149	142	---	---
Lead	ppm	5	4	---	---
Tin	ppm	1	<1	---	---
Aluminum	ppm	4	2	---	---
Chromium	ppm	<1	<1	---	---
Molybdenum	ppm	48	2	---	---
Nickel	ppm	<1	<1	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	<1	<1	---	---
Vanadium	ppm	0	0	---	---



#### ADDITIVES

Calcium	ppm	1085	2184	---	---
Magnesium	ppm	944	31	---	---
Zinc	ppm	1231	1166	---	---
Phosphorus	ppm	1047	1012	---	---
Barium	ppm	<1	<1	---	---
Boron	ppm	20	18	---	---

**MILLER PAVING LTD.**  
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#### Diagnosis

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. All component wear rates are normal. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Light fuel dilution occurring. No other contaminants were detected in the oil. Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.

Depot: MIL408MAR2  
Unique No: 5579361  
Signed: Kevin Marson  
Report Date: 19 May 2023



### GRAPHS

