

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [MAPLE SITE SOLUTIONS] LIEBHERR LB28 115540 - Diesel Engi

Sample No: LH0291204

Oil Type: PETRO CANADA 10W40



#### Sample Information

Sample Number	LH0291204	LH0224694	---	---
Sample Date	04 May 2024	11 Jan 2023	---	---
Machine Hours	12022	11268	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Not Changd	---	---
Sample Status	NORMAL	SEVERE	---	---

**LIEBHERR CANADA LTD.**  
 1015 SUTTON DRIVE  
 BURLINGTON, ON  
 CA L7L 5Z8  
 Contact: Steve Lehto  
 steve.lehto@liebherr.com  
 T: (905)319-9222  
 F: (905)319-6617



#### Oil Condition

Visc @ 100°C	cSt	13.7	5.7	---	---
Oxidation (PA)	%	62	60	---	---



#### Contamination

Water	%	NEG	NEG	---	---
Soot %	%	0.4	0.2	---	---
Nitration (PA)	%	65	73	---	---
Sulfation (PA)	%	56	56	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	0.2	31.2	---	---
Silicon	ppm	4	6	---	---
Sodium	ppm	6	2	---	---
Potassium	ppm	<1	1	---	---

#### Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. 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	28	27	---	---
Copper	ppm	6	15	---	---
Lead	ppm	2	5	---	---
Tin	ppm	2	1	---	---
Aluminum	ppm	3	12	---	---
Chromium	ppm	2	2	---	---
Molybdenum	ppm	57	36	---	---
Nickel	ppm	<1	<1	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	<1	<1	---	---
Vanadium	ppm	0	0	---	---



#### Additives

Calcium	ppm	1260	1209	---	---
Magnesium	ppm	927	390	---	---
Zinc	ppm	1239	870	---	---
Phosphorus	ppm	1014	793	---	---
Barium	ppm	1	0	---	---
Boron	ppm	13	41	---	---

Depot: LIEMIS  
 Unique No: 5774919  
 Signed: Wes Davis  
 Report Date: 08 May 2024



### Graphs

