

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR R924 054969-1487 - Diesel Engine

Sample No: LH0278949

Oil Type: PETRO CANADA 10W40



#### SAMPLE INFORMATION

Sample Number	LH0278949	LH0277737	LH0246999	---
Sample Date	26 Jan 2024	17 Oct 2023	26 Jul 2023	---
Machine Hours	2495	2060	1606	---
Oil Hours	0	0	0	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	NORMAL	NORMAL	NORMAL	---

**CLOUTHIER VENTURES LTD.**  
 59 MATTHEWS STREET, R.R. # 5  
 PEMBROKE, ON  
 CA K8A 0A6  
 Contact: Travis Bennett  
 tbennett@clouthierconst.com  
 T: (613)735-6531  
 F: (613)735-2769



#### OIL CONDITION

Visc @ 100°C	cSt	14.0	13.4	13.2	---
Oxidation (PA)	%	61	63	64	---



#### CONTAMINATION

Water	%	NEG	NEG	NEG	---
Soot %	%	0	0	0	---
Nitration (PA)	%	58	60	67	---
Sulfation (PA)	%	54	54	58	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	23	13	28	---
Sodium	ppm	2	2	3	---
Potassium	ppm	<1	0	<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	12	13	18	---
Copper	ppm	<1	1	2	---
Lead	ppm	0	<1	<1	---
Tin	ppm	0	0	0	---
Aluminum	ppm	2	1	1	---
Chromium	ppm	<1	0	<1	---
Molybdenum	ppm	58	61	59	---
Nickel	ppm	0	<1	0	---
Titanium	ppm	0	0	0	---
Silver	ppm	0	<1	0	---
Manganese	ppm	0	0	<1	---
Vanadium	ppm	0	0	0	---



#### ADDITIVES

Calcium	ppm	1071	1064	1086	---
Magnesium	ppm	970	994	1021	---
Zinc	ppm	1173	1212	1224	---
Phosphorus	ppm	992	1002	1050	---
Barium	ppm	0	<1	0	---
Boron	ppm	3	4	5	---

Depot: CLOPEM  
 Unique No: 5722786  
 Signed: Wes Davis  
 Report Date: 06 Feb 2024



### GRAPHS

