

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR R924 054969-1487 - Diesel Engine

Sample No: LH0277737

Oil Type: PETRO CANADA 10W40



SAMPLE INFORMATION

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

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OIL CONDITION

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



CONTAMINATION

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



ADDITIVES

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

Depot: CLOPEM
Unique No: 5671950
Signed: Kevin Marson
Report Date: 08 Nov 2023



GRAPHS

