

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR A924 060467 - Diesel Engine

Sample No: LH0281116

Oil Type: PETRO CANADA 10W40



SAMPLE INFORMATION

Sample Number	LH0281116	LH0250566	LH0240691	---
Sample Date	05 Jan 2024	12 Sep 2023	19 Oct 2022	---
Machine Hours	23610	23124	21820	---
Oil Hours	0	0	0	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	NORMAL	NORMAL	NORMAL	---

Liebherr Canada

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OIL CONDITION

Visc @ 100°C	cSt	13.4	13.7	13.3	---
Oxidation (PA)	%	61	59	62	---



CONTAMINATION

Water	%	NEG	NEG	NEG	---
Soot %	%	1.1	1.1	0.8	---
Nitration (PA)	%	68	65	71	---
Sulfation (PA)	%	58	58	58	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	7	7	6	---
Sodium	ppm	1	2	2	---
Potassium	ppm	<1	<1	<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	14	18	14	---
Copper	ppm	2	2	8	---
Lead	ppm	<1	<1	<1	---
Tin	ppm	0	0	<1	---
Aluminum	ppm	1	1	1	---
Chromium	ppm	<1	<1	0	---
Molybdenum	ppm	56	63	62	---
Nickel	ppm	0	0	<1	---
Titanium	ppm	0	0	<1	---
Silver	ppm	0	<1	0	---
Manganese	ppm	0	0	<1	---
Vanadium	ppm	0	0	0	---



ADDITIVES

Calcium	ppm	1016	1097	1242	---
Magnesium	ppm	916	986	866	---
Zinc	ppm	1145	1238	1219	---
Phosphorus	ppm	959	1034	1091	---
Barium	ppm	0	0	0	---
Boron	ppm	1	3	8	---

Depot: LIERIC
 Unique No: 5708860
 Signed: Kevin Marson
 Report Date: 10 Jan 2024



GRAPHS

