

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50M 1216-121667 - Diesel Engine

Sample No: LH0164760

Oil Type: LIEBHERR MOTOROIL 10W-40



Sample Information

Sample Number	LH0164760	LH0164793	---	---
Sample Date	09 Nov 2021	24 Jun 2021	---	---
Machine Hours	1000	670	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ATTENTION	NORMAL	---	---

INTERNATIONAL PAPER - DRY CREEK
200 JENSON RD
PRATTVILLE, AL
US 36067
Contact:



Oil Condition

Visc @ 100°C	cSt	11.6	11.9	---	---
Base Number (BN)	mg KOH/g	17.1	---	---	---
Oxidation (PA)	%	47	96	---	---

T: (800)432-8902
F:



Contamination

Water	%	NEG	NEG	---	---
Soot %	%	0.1	0.1	---	---
Nitration (PA)	%	95	77	---	---
Sulfation (PA)	%	44	72	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	1.8	<1.0	---	---
Silicon	ppm	9	7	---	---
Sodium	ppm	<1	1	---	---
Potassium	ppm	2	2	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. No other contaminants were detected in the oil. The oil viscosity is lower than normal. Confirm oil type.



Wear Metals

Iron	ppm	8	5	---	---
Copper	ppm	14	74	---	---
Lead	ppm	<1	1	---	---
Tin	ppm	<1	<1	---	---
Aluminum	ppm	2	<1	---	---
Chromium	ppm	<1	<1	---	---
Molybdenum	ppm	2	8	---	---
Nickel	ppm	0	0	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	<1	<1	---	---
Manganese	ppm	<1	<1	---	---
Vanadium	ppm	0	0	---	---



Additives

Calcium	ppm	4209	2217	---	---
Magnesium	ppm	36	143	---	---
Zinc	ppm	1121	781	---	---
Phosphorus	ppm	1038	661	---	---
Barium	ppm	2	4	---	---
Boron	ppm	209	20	---	---

Depot: INTPRALH
Unique No: 9762969
Signed: Doug Bogart
Report Date: 06 Dec 2021



Graphs

