

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50M 144157-1216 - Diesel Engine

Sample No: LH0255426

Oil Type: LIEBHERR MOTOROIL 10W-40



CALGARY METALS (1985) LTD.
 3415 OGDEN RD. SE.
 CALGARY, AB
 CA T2G 4N4
 Contact: Steve Goodzeck
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 T: (403)262-4542
 F:



SAMPLE INFORMATION

Sample Number	LH0255426	LH0225087	---	---
Sample Date	23 Aug 2023	15 Feb 2023	---	---
Machine Hours	1548	472	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	NORMAL	ABNORMAL	---	---



OIL CONDITION

Visc @ 100°C	cSt	13.0	12.0	---	---
Oxidation (PA)	%	64	205	---	---



CONTAMINATION

Soot %	%	0	0	---	---
Nitration (PA)	%	61	98	---	---
Sulfation (PA)	%	57	114	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	1.3	---	---
Silicon	ppm	6	9	---	---
Sodium	ppm	2	2	---	---
Potassium	ppm	0	3	---	---



WEAR METALS

Iron	ppm	4	10	---	---
Copper	ppm	85	178	---	---
Lead	ppm	2	6	---	---
Tin	ppm	0	<1	---	---
Aluminum	ppm	1	3	---	---
Chromium	ppm	<1	<1	---	---
Molybdenum	ppm	57	45	---	---
Nickel	ppm	0	0	---	---
Titanium	ppm	0	<1	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	<1	1	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

Calcium	ppm	1008	1404	---	---
Magnesium	ppm	938	914	---	---
Zinc	ppm	1139	856	---	---
Phosphorus	ppm	998	794	---	---
Barium	ppm	1	30	---	---
Boron	ppm	8	113	---	---

Diagnosis

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Depot: CAL341CAL
 Unique No: 5633033
 Signed: Wes Davis
 Report Date: 01 Sep 2023



GRAPHS

