

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH50M 110225-1216 - Diesel Engine

Sample No: LH06091573

Oil Type: MOBIL DELVAC 1300 SUPER15W40



**VERSO CORP - QUINNESEC MILL**  
 W6791 US HWY 2  
 QUINNESEC, MI  
 US 49876  
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#### SAMPLE INFORMATION

Sample Number	LH06091573	LH06048278	LH05999673	LH05891742
Sample Date	15 Feb 2024	01 Jan 2024	05 Nov 2023	05 Jul 2023
Machine Hours	13730	13471	0	12764
Oil Hours	0	0	13239	0
Oil Changed	Not Changd	Not Changd	Not Changd	Not Changd
Sample Status	ATTENTION	ATTENTION	ATTENTION	ATTENTION



#### OIL CONDITION

Visc @ 100°C	cSt	11.0	11.2	11.5	11.2
Base Number (BN)	mg KOH/g	11.2	13.5	14.6	5.6
Oxidation (PA)	%	60	51	43	69



#### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	110	108	94	79
Sulfation (PA)	%	50	45	42	59
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	8	8	6
Sodium	ppm	2	2	1	2
Potassium	ppm	<1	<1	0	1



#### WEAR METALS

Iron	ppm	8	6	4	4
Copper	ppm	2	5	0	2
Lead	ppm	0	<1	0	1
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	2	2	2	4
Chromium	ppm	<1	<1	0	0
Molybdenum	ppm	1	2	0	<1
Nickel	ppm	0	0	0	0
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	<1



#### ADDITIVES

Calcium	ppm	3677	4044	4020	1238
Magnesium	ppm	86	85	87	645
Zinc	ppm	1094	1256	1193	754
Phosphorus	ppm	950	939	1051	652
Barium	ppm	0	0	0	0
Boron	ppm	208	209	222	46

#### Diagnosis

No corrective action is recommended at this time. 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Depot: VERQUI  
 Unique No: 10884426  
 Signed: Don Baldrige  
 Report Date: 19 Feb 2024

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### GRAPHS

