

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH50M 118664-1216 - Diesel Engine

Sample No: LH0278873

Oil Type: PETRO CANADA SUPREME 5W30



#### SAMPLE INFORMATION

Sample Number	LH0278873	LH0270619	LH0257023	LH0251652
Sample Date	21 Jan 2024	05 Jul 2023	12 Apr 2023	09 Feb 2023
Machine Hours	12181	10728	10117	9549
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

#### RAM IRON AND METAL

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 TORONTO, ON  
 CA M3J 1Z5  
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#### OIL CONDITION

Visc @ 100°C	cSt	11.2	11.6	13.0	13.5
Oxidation (PA)	%	100	96	69	60



#### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0	0	0
Nitration (PA)	%	86	91	78	58
Sulfation (PA)	%	64	64	61	56
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	7	6	6
Sodium	ppm	2	4	1	1
Potassium	ppm	<1	0	0	0

#### 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	5	5	3	2
Copper	ppm	3	2	<1	2
Lead	ppm	1	1	<1	<1
Tin	ppm	0	0	0	0
Aluminum	ppm	2	<1	1	<1
Chromium	ppm	0	<1	0	0
Molybdenum	ppm	42	53	61	58
Nickel	ppm	<1	<1	<1	0
Titanium	ppm	0	0	0	<1
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



#### ADDITIVES

Calcium	ppm	1653	981	1147	1116
Magnesium	ppm	545	1029	999	950
Zinc	ppm	887	1193	1238	1177
Phosphorus	ppm	755	1040	1088	1101
Barium	ppm	0	0	0	0
Boron	ppm	36	24	3	5

Depot: RAMTOR  
 Unique No: 5711336  
 Signed: Wes Davis  
 Report Date: 23 Jan 2024



### GRAPHS

