

LIEBHERR

CONSTRUCTION EQUIPMENT



[(361220)] LIEBHERR LH50M 134706-1216 - Diesel Engine

Sample No: LH

Oil Type: PETRO CANADA SUPREME 5W30



SAMPLE INFORMATION

Sample Number	LH	LH0234443	LH0250105	LH0242765
Sample Date	17 Sep 2023	15 Jun 2023	27 Mar 2023	21 Jan 2023
Machine Hours	0	3528	2610	2610
Oil Hours	0	0	0	0
Oil Changed	N/A	Not Changd	N/A	N/A
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

Industrial Metals

550 Messier St.
Winnipeg, MB
CA R2J 0G5
Contact: Service Manager



OIL CONDITION

Visc @ 100°C	cSt	12.8	13.6	13.5	12.0
Oxidation (PA)	%	91	66	65	82

T:
F:



CONTAMINATION

Soot %	%	0	0	0	0
Nitration (PA)	%	84	69	67	84
Sulfation (PA)	%	63	52	60	60
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	1.6
Silicon	ppm	6	6	6	6
Sodium	ppm	2	1	2	4
Potassium	ppm	<1	<1	0	<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	6	3	3	4
Copper	ppm	4	2	5	2
Lead	ppm	<1	<1	<1	<1
Tin	ppm	<1	0	0	0
Aluminum	ppm	1	<1	1	2
Chromium	ppm	<1	<1	0	0
Molybdenum	ppm	59	59	59	57
Nickel	ppm	<1	0	<1	<1
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	<1	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1041	1012	1133	935
Magnesium	ppm	993	984	989	1097
Zinc	ppm	1210	1197	1231	1244
Phosphorus	ppm	1049	1070	1105	1123
Barium	ppm	<1	0	<1	0
Boron	ppm	1	2	8	45

Depot: IND550WIN
Unique No: 5644170
Signed: Wes Davis
Report Date: 18 Sep 2023



GRAPHS

