

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH30M 119193-1253 - Diesel Engine

Sample No: LH0270555

Oil Type: PETRO CANADA 10W40



SAMPLE INFORMATION

Sample Number	LH0270555	LH0261284	LH0234937	LH0230633
Sample Date	04 Oct 2023	19 Apr 2023	14 Nov 2022	06 Jun 2022
Machine Hours	5149	4489	3951	3290
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	N/A	Changed
Sample Status	ABNORMAL	NORMAL	ABNORMAL	ABNORMAL

BRIGHTON RECYCLING

686 COUNTY RD 64
BRIGHTON, ON
CA K0K 1H0
Contact: Angel Guan
angel@brightonrecycling.ca
T: (613)475-1001
F: (613)475-1097



OIL CONDITION

Visc @ 100°C	cSt	12.3	12.2	11.0	11.4
Oxidation (PA)	%	74	62	92	79



CONTAMINATION

Soot %	%	0	0	0	0
Nitration (PA)	%	76	65	85	85
Sulfation (PA)	%	58	52	65	63
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	2	1.9
Silicon	ppm	7	7	7	8
Sodium	ppm	4	2	5	5
Potassium	ppm	5	<1	3	2

Diagnosis

We advise that you check for visible metal particles in the oil. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Light concentration of visible metal present. There is no indication of any contamination in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.



WEAR METALS

Iron	ppm	7	4	6	5
Copper	ppm	6	3	8	5
Lead	ppm	3	<1	2	1
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	2	2	2	1
Chromium	ppm	<1	0	0	<1
Molybdenum	ppm	60	56	56	52
Nickel	ppm	0	0	<1	0
Titanium	ppm	0	<1	<1	0
Silver	ppm	<1	0	0	<1
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1039	1160	838	975
Magnesium	ppm	964	915	1078	1039
Zinc	ppm	1172	1176	1145	1257
Phosphorus	ppm	943	1069	995	1103
Barium	ppm	<1	0	0	0
Boron	ppm	1	11	16	41

Depot: BRI686BRI
Unique No: 5657285
Signed: Kevin Marson
Report Date: 12 Oct 2023



GRAPHS

