

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH60M 097298-1217 - Diesel Engine

Sample No: LH0200412

Oil Type: PETRO CANADA DURON SHP 10W30



SAMPLE INFORMATION

Sample Number	LH0200412	LH0229233	LH0229229	LH0217413
Sample Date	07 Jul 2023	14 Apr 2023	14 Jan 2023	06 Aug 2022
Machine Hours	12758	7000	6390	5211
Oil Hours	500	500	500	590
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

MID CITY SCRAP

548 STATE RD
WESTPORT, MA
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OIL CONDITION

Visc @ 100°C	cSt	10.8	10.8	11.0	11.0
Base Number (BN)	mg KOH/g	7.8	6.3	7.3	7.5
Oxidation (PA)	%	61	63	63	72



CONTAMINATION

Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	74	70	74	86
Sulfation (PA)	%	50	48	51	58
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	15	14	7
Sodium	ppm	2	<1	2	<1
Potassium	ppm	<1	2	<1	2



WEAR METALS

Iron	ppm	6	8	6	8
Copper	ppm	4	3	5	14
Lead	ppm	0	0	<1	<1
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	<1	<1	<1	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	64	57	62	58
Nickel	ppm	0	0	<1	0
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	0	<1	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1149	1078	1074	1026
Magnesium	ppm	1002	945	934	857
Zinc	ppm	1298	1202	1214	1157
Phosphorus	ppm	1069	958	992	933
Barium	ppm	<1	0	0	0
Boron	ppm	8	6	8	2

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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Depot: MIDWESLH
Unique No: 10566090
Signed: Wes Davis
Report Date: 24 Jul 2023



GRAPHS

