

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH60C102201 - Diesel Engine

Sample No: LH0242523

Oil Type: PETRO CANADA SUPREME SYNTHETIC 5W30



SAMPLE INFORMATION

Sample Number	LH0242523	LH	LH	LH
Sample Date	26 Oct 2022	20 Nov 2021	19 Oct 2021	18 Aug 2021
Machine Hours	10545	8609	8393	7998
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ATTENTION	ABNORMAL	SEVERE	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	12.9	10.9	6.9	13.3
Oxidation (PA)	%	89	113	79	108



CONTAMINATION

Soot %	%	0	0	0	0
Nitration (PA)	%	88	106	92	112
Sulfation (PA)	%	63	71	58	70
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	2.1	5.7	17.4	<1.0
Silicon	ppm	7	7	7	6
Sodium	ppm	2	5	4	4
Potassium	ppm	1	3	2	3

Diagnosis

No corrective action is recommended at this time. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. All component wear rates are normal. Light fuel dilution occurring. No other contaminants were detected in the oil. Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.



WEAR METALS

Iron	ppm	6	8	4	7
Copper	ppm	2	2	1	2
Lead	ppm	<1	<1	<1	<1
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	2	3	2	2
Chromium	ppm	0	<1	<1	<1
Molybdenum	ppm	60	60	50	61
Nickel	ppm	0	<1	<1	<1
Titanium	ppm	<1	0	0	0
Silver	ppm	0	<1	<1	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1114	837	690	919
Magnesium	ppm	985	1227	980	1215
Zinc	ppm	1221	1269	1052	1349
Phosphorus	ppm	1085	1107	930	1133
Barium	ppm	0	<1	0	0
Boron	ppm	3	16	16	9

Depot: BENGUE
 Unique No: 5476285
 Signed: Wes Davis
 Report Date: 31 Oct 2022



GRAPHS

