

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L586 059873-1334 - Diesel Engine

Sample No: LH

Oil Type: DIESEL ENGINE OIL SAE 30



Sample Information

Sample Number	LH	LH0250090	LH0234471	LH0199550
Sample Date	14 Apr 2024	05 Jun 2023	08 Aug 2022	08 Aug 2021
Machine Hours	8009	0	4065	0
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	N/A	N/A
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

Bird's Hill Gravel and Stone Ltd.

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Oil Condition

Visc @ 100°C	cSt	12.9	11.8	12.4	11.7
Oxidation (PA)	%	97	85	112	205



Contamination

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0	0.2	0.1
Nitration (PA)	%	96	88	109	122
Sulfation (PA)	%	69	60	74	109
Glycol	%	NEG	NEG	NEG	0.0
Fuel	%	<1.0	<1.0	<1.0	1
Silicon	ppm	8	14	7	12
Sodium	ppm	2	4	3	4
Potassium	ppm	1	2	7	7

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. Viscosity of sample indicates oil is within SAE 40 range, advise investigate. The condition of the oil is acceptable for the time in service.



Wear Metals

Iron	ppm	13	8	22	34
Copper	ppm	3	4	41	220
Lead	ppm	<1	<1	3	10
Tin	ppm	<1	<1	1	3
Aluminum	ppm	2	2	2	2
Chromium	ppm	<1	<1	1	1
Molybdenum	ppm	49	59	52	50
Nickel	ppm	0	0	<1	<1
Titanium	ppm	0	<1	<1	<1
Silver	ppm	0	<1	<1	<1
Manganese	ppm	<1	<1	1	3
Vanadium	ppm	0	0	0	0



Additives

Calcium	ppm	1333	895	1257	1279
Magnesium	ppm	824	1121	887	995
Zinc	ppm	1192	1247	1178	935
Phosphorus	ppm	969	1077	918	762
Barium	ppm	0	0	3	18
Boron	ppm	17	25	12	40

Depot: BIRWIN

Unique No: 5761853

Signed: Kevin Marson

Report Date: 15 Apr 2024



Graphs

