

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L580 047314-1464 - Diesel Engine

Sample No: LHMC122559

Oil Type: LIEBHERR



SAMPLE INFORMATION

Sample Number	LHMC122559	LHMC124415	LHMC122457	LHMC122546
Sample Date	28 Feb 2024	10 Oct 2023	12 Oct 2022	31 May 2022
Machine Hours	6115	5518	4452	4030
Oil Hours	250	1066	300	750
Oil Changed	Not Changd	N/A	N/A	Not Changd
Sample Status	ATTENTION	ATTENTION	ATTENTION	ATTENTION

GENESEE AGGREGATES

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OIL CONDITION

Visc @ 100°C	cSt	11.7	11.4	11.4	11.6
Base Number (BN)	mg KOH/g	7.8	5.6	7.3	7.0
Oxidation (PA)	%	55	78	69	56



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.2	0.1	0.1
Nitration (PA)	%	72	86	90	73
Sulfation (PA)	%	52	65	63	52
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	8	11	7
Sodium	ppm	3	2	4	2
Potassium	ppm	2	5	4	4



WEAR METALS

Iron	ppm	9	36	13	7
Copper	ppm	2	12	9	6
Lead	ppm	<1	3	2	<1
Tin	ppm	0	1	1	<1
Aluminum	ppm	1	3	2	2
Chromium	ppm	<1	3	1	<1
Molybdenum	ppm	6	20	4	3
Nickel	ppm	0	2	<1	0
Titanium	ppm	64	4	4	4
Silver	ppm	0	0	<1	<1
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	<1	<1	<1	<1



ADDITIVES

Calcium	ppm	1173	1395	1511	1362
Magnesium	ppm	631	809	707	612
Zinc	ppm	960	1039	913	882
Phosphorus	ppm	823	964	786	744
Barium	ppm	0	10	0	2
Boron	ppm	96	22	35	81

Diagnosis

No corrective action is recommended at this time. 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Depot: GENMILLH
Unique No: 10923595
Signed: Jonathan Hester
Report Date: 13 Mar 2024

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GRAPHS

