

LIEBHERR

CONSTRUCTION EQUIPMENT



- Diesel Engine

Sample No: LHMC122518

Oil Type: COREY OIL 10W40



Sample Information

Sample Number	LHMC122518	LHMC122559	LHMC124415	LHMC122457
Sample Date	01 Jul 2024	28 Feb 2024	10 Oct 2023	12 Oct 2022
Machine Hours	6886	6115	5518	4452
Oil Hours	0	250	1066	300
Oil Changed	Not Changd	Not Changd	N/A	N/A
Sample Status	ATTENTION	ATTENTION	ATTENTION	ATTENTION

GENESEE AGGREGATES

PO BOX 270518
MILWAUKEE, WI
US 53227
Contact: MATT ZARNSTORFF
mzarnstorff@genagg.com
T: (414)322-8565
F: (262)968-3247



Oil Condition

Visc @ 100°C	cSt	12.3	11.7	11.4	11.4
Base Number (BN)	mg KOH/g	6.2	7.8	5.6	7.3
Oxidation (PA)	%	71	55	78	69



Contamination

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.2	0.1
Nitration (PA)	%	84	72	86	90
Sulfation (PA)	%	63	52	65	63
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	8	7	8	11
Sodium	ppm	4	3	2	4
Potassium	ppm	3	2	5	4



Wear Metals

Iron	ppm	11	9	36	13
Copper	ppm	3	2	12	9
Lead	ppm	2	<1	3	2
Tin	ppm	<1	0	1	1
Aluminum	ppm	2	1	3	2
Chromium	ppm	<1	<1	3	1
Molybdenum	ppm	5	6	20	4
Nickel	ppm	<1	0	2	<1
Titanium	ppm	69	64	4	4
Silver	ppm	<1	0	0	<1
Manganese	ppm	<1	0	<1	<1
Vanadium	ppm	<1	<1	<1	<1



Additives

Calcium	ppm	1296	1173	1395	1511
Magnesium	ppm	726	631	809	707
Zinc	ppm	1156	960	1039	913
Phosphorus	ppm	973	823	964	786
Barium	ppm	0	0	10	0
Boron	ppm	24	96	22	35

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: 11126064
Signed: Don Baldrige
Report Date: 17 Jul 2024



Graphs

