

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L580 032719-1170 - Diesel Engine

Sample No: LHMC122562

Oil Type: COREY OIL 10W40 CJ-4



SAMPLE INFORMATION

Sample Number	LHMC122562	LHMC122581	LHMC122538	LHMC122583
Sample Date	27 Dec 2023	11 Jul 2023	09 Nov 2022	22 Sep 2022
Machine Hours	6176	15070	13939	13589
Oil Hours	250	0	307	305
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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	13.4	13.2	14.0	14.0
Base Number (BN)	mg KOH/g	7.4	8.1	10.7	9.2
Oxidation (PA)	%	63	63	58	53



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	1.8	0.9	0.3	0.4
Nitration (PA)	%	86	83	57	69
Sulfation (PA)	%	61	56	54	53
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	6	5	7
Sodium	ppm	0	3	2	2
Potassium	ppm	2	2	1	<1

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.



WEAR METALS

Iron	ppm	34	23	5	7
Copper	ppm	11	14	<1	1
Lead	ppm	2	2	<1	<1
Tin	ppm	1	1	<1	0
Aluminum	ppm	4	4	1	5
Chromium	ppm	1	1	<1	<1
Molybdenum	ppm	60	60	59	14
Nickel	ppm	<1	<1	0	0
Titanium	ppm	<1	1	4	56
Silver	ppm	0	0	<1	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	<1	2



ADDITIVES

Calcium	ppm	1004	1038	1091	1286
Magnesium	ppm	867	961	928	669
Zinc	ppm	1147	1285	1267	1033
Phosphorus	ppm	1023	1050	1045	930
Barium	ppm	11	0	<1	0
Boron	ppm	1	6	16	93

Depot: GENMILLH
Unique No: 10818532
Signed: Wes Davis
Report Date: 08 Jan 2024



GRAPHS

