

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH80M 155277-1218 - Diesel Engine

Sample No: LH0191254

Oil Type: LIEBHERR MOTOROIL 5W-30 LOW ASH



Sample Information

Sample Number	LH0191254	LH0243738	LH0191253	LH0191255
Sample Date	24 Apr 2024	14 Mar 2024	01 Mar 2024	11 Feb 2024
Machine Hours	1298	1050	850	600
Oil Hours	248	200	250	238
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

NUCOR STEEL

2911 E NUCOR RD

NORFOLK, NE

US 68702

Contact: MARK EICHBERGER

mark.eichberger@nucor.com

T: (402)750-5100

F: (402)644-0389



Oil Condition

Visc @ 100°C	cSt	11.9	11.9	11.8	12.1
Base Number (BN)	mg KOH/g	15.6	16.1	12.8	7.1
Oxidation (PA)	%	44	43	49	59



Contamination

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	94	89	89	73
Sulfation (PA)	%	41	41	45	52
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	8	7	6
Sodium	ppm	3	0	2	2
Potassium	ppm	2	3	0	3



Wear Metals

Iron	ppm	6	6	5	1
Copper	ppm	3	1	1	2
Lead	ppm	2	0	0	0
Tin	ppm	2	<1	1	<1
Aluminum	ppm	2	3	1	<1
Chromium	ppm	<1	<1	0	0
Molybdenum	ppm	2	3	1	0
Nickel	ppm	<1	0	0	0
Titanium	ppm	<1	<1	0	<1
Silver	ppm	<1	<1	0	0
Manganese	ppm	1	<1	0	<1
Vanadium	ppm	0	<1	0	0



Additives

Calcium	ppm	4535	4448	3388	1161
Magnesium	ppm	40	73	288	685
Zinc	ppm	1268	1182	1094	763
Phosphorus	ppm	1143	990	950	690
Barium	ppm	0	2	0	0
Boron	ppm	240	269	186	87

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.

Depot: NUCOR

Unique No: 11016718

Signed: Sean Felton

Report Date: 08 May 2024



Graphs

