

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH80 124551 - Diesel Engine

Sample No: LH0191256

Oil Type: MOBIL 15W40



#### SAMPLE INFORMATION

Sample Number	LH0191256	LH0243733	LH0191228	LH0191229
Sample Date	24 Jan 2024	05 Dec 2023	30 Oct 2023	17 Sep 2023
Machine Hours	9962	9698	9347	8867
Oil Hours	269	351	480	220
Oil Changed	N/A	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

#### NUCOR STEEL

2911 E NUCOR RD  
NORFOLK, NE  
US 68702

Contact: NICOLE IRISH  
nicole.irish@nucor.com  
T: (402)500-9035  
F: (402)644-0389



#### OIL CONDITION

Visc @ 100°C	cSt	13.9	14.0	13.4	13.8
Base Number (BN)	mg KOH/g	8.5	8.2	7.8	8.7
Oxidation (PA)	%	55	55	60	52



#### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	68	64	72	60
Sulfation (PA)	%	53	54	55	52
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	7	7	6
Sodium	ppm	2	0	1	2
Potassium	ppm	2	5	5	3



#### WEAR METALS

Iron	ppm	2	4	4	2
Copper	ppm	2	2	3	<1
Lead	ppm	1	<1	<1	0
Tin	ppm	<1	<1	0	0
Aluminum	ppm	1	2	2	0
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	16	16	16	18
Nickel	ppm	0	<1	0	0
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	0	<1
Vanadium	ppm	0	0	0	0



#### ADDITIVES

Calcium	ppm	1173	1175	1184	1289
Magnesium	ppm	733	748	728	854
Zinc	ppm	1163	1140	1165	1283
Phosphorus	ppm	1017	1003	1018	1075
Barium	ppm	0	12	5	0
Boron	ppm	63	58	45	59

#### 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: 10859460  
Signed: Wes Davis  
Report Date: 02 Feb 2024



### GRAPHS

