

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH80 124551 - Diesel Engine

Sample No: LH0191226

Oil Type: MOBIL 15W40



#### SAMPLE INFORMATION

Sample Number	LH0191226	LH0243770	LH0191225	LH0243772
Sample Date	25 Aug 2023	03 Aug 2023	19 Jul 2023	23 Jun 2023
Machine Hours	8647	8381	8146	7905
Oil Hours	266	235	241	200
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

#### NUCOR STEEL

2911 E NUCOR RD  
NORFOLK, NE  
US 68702

Contact: NICOLE IRISH  
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T: (402)500-9035  
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#### OIL CONDITION

Visc @ 100°C	cSt	13.6	13.8	13.8	13.8
Base Number (BN)	mg KOH/g	8.5	9.3	9.9	12.3
Oxidation (PA)	%	52	57	58	55



#### CONTAMINATION

Soot %	%	0.1	0.1	0.1	0.2
Nitration (PA)	%	59	52	53	46
Sulfation (PA)	%	50	49	51	47
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	6	5	5
Sodium	ppm	2	1	1	<1
Potassium	ppm	4	4	0	<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	5	3	3	3
Copper	ppm	1	<1	<1	<1
Lead	ppm	0	<1	<1	<1
Tin	ppm	<1	0	0	0
Aluminum	ppm	5	1	1	0
Chromium	ppm	<1	0	0	<1
Molybdenum	ppm	26	61	65	61
Nickel	ppm	0	0	0	0
Titanium	ppm	<1	<1	<1	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	0
Vanadium	ppm	0	0	<1	0



#### ADDITIVES

Calcium	ppm	1206	1210	1230	1101
Magnesium	ppm	828	1030	1039	956
Zinc	ppm	1216	1363	1332	1241
Phosphorus	ppm	1024	1088	1100	1036
Barium	ppm	0	0	0	0
Boron	ppm	39	2	2	2

Depot: NUCOR  
Unique No: 10631905  
Signed: Wes Davis  
Report Date: 05 Sep 2023

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### GRAPHS

