

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

LIEBHERR LTM1300 BT1760

Upper Gearbox

GEAR OIL SAE 80W90 (--- LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORM	ΙΑΤΙΟΝ	method	limit/base	current	history1	history2
Sample Number		Client Info		HPL0002641		
Sample Date		Client Info		22 Nov 2023		
Machine Age	hrs	Client Info		4726		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	72		
Chromium	ppm	ASTM D5185m	>10	<1		
Nickel	ppm	ASTM D5185m	>10	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>25	<1		
Lead	ppm	ASTM D5185m	>50	0		
Copper	ppm	ASTM D5185m	>200	0		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	400	0		
Barium	ppm	ASTM D5185m	200	0		
Molybdenum	ppm	ASTM D5185m	12	0		
Manganese	ppm	ASTM D5185m		2		
Magnesium	ppm	ASTM D5185m	12	0		
Calcium	ppm	ASTM D5185m	150	11		
Phosphorus	ppm	ASTM D5185m	1650	132		
Zinc	ppm	ASTM D5185m	125	41		
Sulfur	ppm	ASTM D5185m	22500	13904		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<1		
Sodium	ppm	ASTM D5185m	>170	0		
Potassium	ppm	ASTM D5185m	>20	0		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	2.00	0.21		



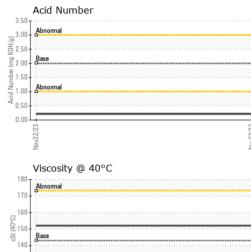
Base

130. Abnormal

120 Nov22/23

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OIL ANALYSIS REPORT



VISUAL		method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE			
Yellow Metal	scalar	*Visual	NONE	NONE			
Precipitate	scalar	*Visual	NONE	NONE			
Silt	scalar	*Visual	NONE	MODER			
Debris	scalar	*Visual	NONE	NONE			
Sand/Dirt	scalar	*Visual	NONE	NONE			
Appearance	scalar	*Visual	NORML	NORML			
- 6461	scalar	*Visual	NORML	NORML			
Emulsified Water	scalar	*Visual	>0.2	NEG			
Free Water	scalar	*Visual		NEG			
FLUID PROPERTI	IES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	143	152			
SAMPLE IMAGES		method	limit/base	current	history1	history2	
EZZZZANN Color					no image	no image	
Bottom					no image	no image	
GRAPHS							
Iron (ppm)				Lead (ppm)			
600 Severe			200	Severe			
E 400 + Abnormal			퉡 100	Abnormal			
0				1			
Vov22/23			Nov22/23	Nov22/23			
Nov			Nov	Nov			
Aluminum (ppm)				Chromium (pp	m)		
100 Severe			30				
Abnormal			E 20	Abnormal			
			(
Nov22/23			Nov22/23	Nov22/23			
Novź			Novi	Nov			
Copper (ppm)				Silicon (ppm)			
⁰⁰⁰ I			150	Severe			
= 400 + 0			E 100	Abnormal			
0							
Nov22/23			Nov22/23	Vov22/23			
—			Nov	—			
Viscosity @ 40°C			(B/HC	Acid Number			
180 [2] 160			<u>9</u> 4.00	Abnormal			
(2) 160 - 8			ja 2.00	Base Abnormal	*****		
120			(b)(H0,4.00 Will Water Acid Mumber Acid Mumber 203				
Nov22/23			Nov22/23 Aci	Nov22/23			
Nov			Nov	Nov			
Sample No. : HPL0002641 F Lab Number : 06015271 D Unique Number : 10754415 D Test Package : MOB 2	06015271Diagnosed: 26 Nov 202310754415Diagnostician: Don BaldridgeMOB 2				STEVENSON CRAN 410 STEVENSON D BOLINGBROOK, US 6044 Contact: DAVE KOEHN davidk@stevensoncrane.co		

Contact/Location: DAVE KOEHNE - STEBOL