# LIEBHERR

## **CONSTRUCTION EQUIPMENT**

### LIEBHERR LH110 1227-155752 - Front Right Wheel Hub

Sample No: LH0280588

Oil Type: GEAR OIL SAE 80W90

SAMPLE INFORMATION							
Sample Number	LH0280588	LH0280577	LH0280566				
Sample Date	19 Mar 2024	20 Feb 2024	11 Jan 2024				
Machine Hours	1544	1022	507				
Oil Hours	0	0	0				
Oil Changed	Not Changd	Changed	Not Changd				
Sample Status	ABNORMAL	NORMAL	NORMAL				

OIL CO	NDITION				
Visc @ 40°C	cSt	<b>122</b>	O 173	O 173	

CONT	AMINATIO	ON			
Water	%	NEG	NEG	NEG	
Silicon	ppm	<b>4</b>	<b>10</b>	<b>8</b>	
Sodium	ppm	<b>0</b>	<b>3</b>	<b>4</b>	
Potassium	ppm	<b>2</b>	0	O 2	

Iron         ppm         23         46         32            Copper         ppm         <1         0         0            Lead         ppm         <1         0         0            Tin         ppm         1         0         <1            Aluminum         ppm         1         <1         <1            Chromium         ppm         <1         0         0            Molybdenum         ppm         2         0         0            Nickel         ppm         <1         0         <1            Titanium         ppm         0         0         0            Silver         ppm         0         0         0	WE	AR META	LS			
Lead         ppm         <1         0         0            Tin         ppm         1         0         <1            Aluminum         ppm         1         <1         <1            Chromium         ppm         <1         0         0            Molybdenum         ppm         2         0         0         0            Nickel         ppm         <1         0         <1            Titanium         ppm         0         0         0            Silver         ppm         0         0         0	Iron	ppm	<b>23</b>	<b>46</b>	O 32	
Tin         ppm         1         0             Aluminum         ppm         1         <1	Copper	ppm	<b>()</b> <1	<b>O</b> 0	<b>0</b>	
Aluminum       ppm       0       1       0          Chromium       ppm       0       0       0          Molybdenum       ppm       0       0       0          Nickel       ppm       0       0       0          Titanium       ppm       0       0       0          Silver       ppm       0       0       0	Lead	ppm	<b>()</b> <1	<b>0</b>	O 0	
Chromium         ppm         O         0            Molybdenum         ppm         O         0            Nickel         ppm         O         0         <1	Tin	ppm	<b>1</b>	O 0	O <1	
Molybdenum         ppm         2         0         0            Nickel         ppm         0          0         <1            Titanium         ppm         0         0         0            Silver         ppm         0         0         0	Aluminum	ppm	<b>1</b>	O <1	O <1	
Nickel         ppm         ○ <1         ○ 0         ○ 1            Titanium         ppm         ○ 0         ○ 0         ○ 0            Silver         ppm         0         0         0	Chromium	ppm	<b>○</b> <1	O 0	O 0	
Titanium         ppm <b>0</b> 0         0            Silver         ppm <b>0</b> 0         0	Molybdenum	ppm	<b>2</b>	<b>0</b>	0	
Silver ppm <b>0</b> 0	Nickel	ppm	<b>○</b> <1	O 0	O <1	
	Titanium	ppm	<b>0</b>	<b>0</b>	<b>0</b>	
	Silver	ppm	0	0	0	
Manganese ppm O<1	Manganese	ppm	<b>()</b> <1	<b>1</b>	1	
<b>Vanadium</b> ppm <b>&lt;1</b>	Vanadium	ppm	<1	<1	0	

ADDI	TIVES				
Calcium	ppm	<b>187</b>	O 132	152	
Magnesium	ppm	<b>6</b>	O 0	3	
Zinc	ppm	<b>96</b>	O 13	25	
Phosphorus	ppm	<b>427</b>	O 1448	1273	
Barium	ppm	<b>0</b>	0	<1	
Boron	ppm	<b>1</b>	<b>4</b>	5	



KINDER MORGAN 4301 IVERSON TRINITY, AL US 35601

Contact: CHIP OAKES

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#### Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The condition of the oil is acceptable for the time in service.

Depot: KINTRI
Unique No: 10950661
Signed: Don Baldridge
Report Date: 01 Apr 2024

## LIEBHERR

CONSTRUCTION EQUIPMENT





#### **GRAPHS**

