# LIEBHERR

**CONSTRUCTION EQUIPMENT** 



Sample No: LH0256991

Oil Type: DIESEL ENGINE OIL SAE 15W40

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SAMPLEINFORMATION					
Sample Number		LH0256991			
Sample Date		10 Aug 2023			
Machine Hours		12158			
Oil Hours		0			
Oil Changed		N/A			
Sample Status		ABNORMAL			
OIL CONDITION					
Visc @ 100°C	cSt	<b>16.4</b>			

Oxidation (PA)	%	150					
CONTAMINATION							
Soot %	%	<b>0</b> 0					
Nitration (PA)	%	149					
Sulfation (PA)	%	83					
Glycol	%	NEG					
Fuel	%	<1.0					
Silicon	ppm	<b>5</b>					
Sodium	ppm	<b>6</b>					
Potassium	ppm	<b>2</b>					

WEA!	R METALS			
Iron	ppm	<b>14</b>	 	
Copper	ppm	<b>2</b>	 	
Lead	ppm	<b>2</b>	 	
Tin	ppm	<b>0</b> <1	 	
Aluminum	ppm	<b>3</b>	 	
Chromium	ppm	<b>0</b> <1	 	
Molybdenum	ppm	<b>65</b>	 	
Nickel	ppm	<b>0</b>	 	
Titanium	ppm	<b>0</b>	 	
Silver	ppm	<b>0</b> <1	 	
Manganese	ppm	<b>0</b> <1	 	
Vanadium	ppm	0	 	

ADDITIVES						
Calcium	ppm	<b>1647</b>				
Magnesium	ppm	<b>691</b>				
Zinc	ppm	<b>1209</b>				
Phosphorus	ppm	<b>1055</b>				
Barium	ppm	<b>0</b>				
Boron	ppm	<b>31</b>				



### LIEBHERR CANADA LTD.

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Contact: Joseph Rodgers

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#### Diagnosis

We advise that you check for faulty combustion and a possible overheat condition. We recommend that you drain the oil from the component if this has not already been done. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. A small degree of oil oxidation was indicated. The oil is no longer serviceable.

Depot: LIEMIS
Unique No: 5620619
Signed: Kevin Marson
Report Date: 14 Aug 2023

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### **GRAPHS**

