# LIEBHERR

**CONSTRUCTION EQUIPMENT** 

### [(364849)] LIEBHERR R934 053396-1487 - Diesel Engine

Sample No: LH0219927

Oil Type: SHELL ROTELLA T6 5W40

5				
Sam	ole Inforn	nation		
Sample Number		LH0219927	LH	 
Sample Date		15 Mar 2024	09 Feb 2022	 
Machine Hours		1995	0	 
Oil Hours		0	0	 
Oil Changed		Changed	Not Changd	 
Sample Status		NORMAL	NORMAL	 
Oil Co	ondition			
Visc @ 100°C	cSt	<b>13.7</b>	O 12.2	 
Oxidation (PA)	%	77	59	 
-L	70	,,,	00	
Cont	aminatio	n		
Water	%	NEG	NEG	 
Soot %	%	<b>0</b>	O 0	 
Nitration (PA)	%	82	42	 
Sulfation (PA)	%	66	51	 
Glycol	%	NEG	NEG	 
Fuel	%	<1.0	0.2	 
Silicon	ppm	<b>8</b>	O 51	 
Sodium	ppm	<b>4</b>	<b>O</b> 5	 
Potassium	ppm	<b>3</b>	<b>3</b>	 
<b>(</b> )				

Wea	r Metals			
Iron	ppm	<b>13</b>	○ 32	 
Copper	ppm	<b>38</b>	<b>42</b>	 
Lead	ppm	<b></b> <1	O 2	 
Tin	ppm	<b>0</b>	O <1	 
Aluminum	ppm	<b>2</b>	<b>4</b>	 
Chromium	ppm	<b>0</b>	0 1	 
Molybdenum	ppm	<b>23</b>	<b>40</b>	 
Nickel	ppm	<b>0</b>	O <1	 
Titanium	ppm	<1	O <1	 
Silver	ppm	<b>0</b>	0	 
Manganese	ppm	<b>0</b>	<b>4</b>	 
Vanadium	ppm	0	0	 

Additives							
Calcium	ppm	<b>2230</b>	O 1799				
Magnesium	ppm	<b>77</b>	○ 816				
Zinc	ppm	<b>1217</b>	O 1013				
Phosphorus	ppm	<b>985</b>	○ 866				
Barium	ppm	<b>0</b>	<b>4</b>				
Boron	ppm	<b>77</b>	O 114				



HUBERT & FILS 474 ROUTE 105 BOIS-FRANC, QC CA J9E 3A9 Contact: Eric Brisebois ericbrisebois99@gmail.com

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#### 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 condition of the oil is acceptable for the time in service.

Depot:HUBBOIUnique No:5750296Signed:Wes DavisReport Date:28 Mar 2024

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### **Graphs**

