

# LIEBHERR L580 71616 - Diesel Engine

Sample No: LH0296396

Oil Type: PETRO CANADA SUPREME 5W30

#### **Sample Information**

Sample Number		LH0296396	LH0278696	LH0270318				
Sample Date		07 Jul 2024	22 Feb 2024	25 Sep 2023				
Machine Hours		7132	5129	2888				
Oil Hours		0	0	0				
Oil Changed		Changed	Changed	N/A				
Sample Status		NORMAL	NORMAL	NORMAL				
Oil Condition								
Visc @ 100°C	cSt	14.1	13.6	13.5				
Oxidation (PA)	%	74	66	63				

Contamination					
Water	%	NEG	NEG	NEG	
Soot %	%	0	0 0	0	
Nitration (PA)	%	70	63	55	
Sulfation (PA)	%	57	54	54	
Glycol	%	NEG	NEG	NEG	
Fuel	%	<1.0	<1.0	<1.0	
Silicon	ppm	06	8	5	
Sodium	ppm	<b>2</b>	0 1	02	
Potassium	ppm	0 2	02	0 1	

## Wear Metal

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Iron	ppm	04	0 4	0 4	
Copper	ppm	01	01	○ 5	
Lead	ppm	<b>○</b> <1	○ <1	0 1	
Tin	ppm	0 🔘	0	○ <1	
Aluminum	ppm	01	2	○ <1	
Chromium	ppm	<b>○</b> <1	○ <1	0	
Molybdenum	ppm	0 47	53	59	
Nickel	ppm	0 🔘	0	0	
Titanium	ppm	0	0	0	
Silver	ppm	0 🔘	0	○ <1	
Manganese	ppm	0 🔘	0	0	
Vanadium	ppm	0	0	0	

Additives						
Calcium	ppm	0 1267	0 1188	0 1047		
Magnesium	ppm	0 785	883	965		
Zinc	ppm	0 1221	0 1176	0 1181		
Phosphorus	ppm	988	0 1003	975		
Barium	ppm	0	0	◯ <1		
Boron	ppm	0 23	0 16	0 4		





#### LIEBHERR CANADA LTD.

1015 SUTTON DRIVE BURLINGTON, ON CA L7L 5Z8 Contact: Joseph Rodgers joseph.rodgers@liebherr.com T:

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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. Viscosity of sample indicates oil is within SAE 40 range, advise investigate. The condition of the oil is acceptable for the time in service.

Depot:LIEMISUnique No:5811642Signed:Kevin MarsonReport Date:08 Jul 2024

Report Id: LIEMIS [WCAMIS] 02646090 (Generated: 07/08/2024 18:26:39) Rev: 1

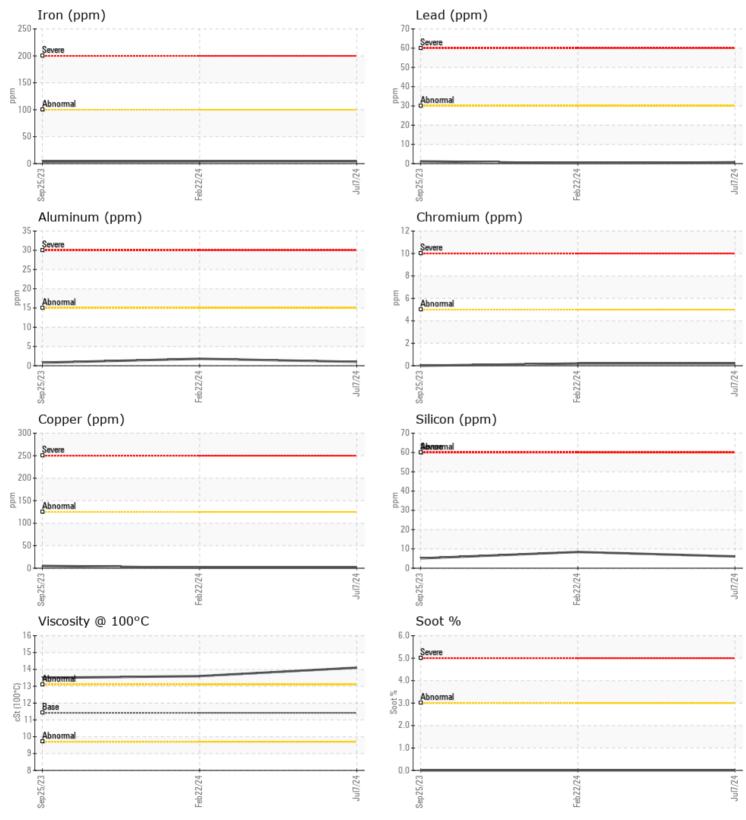
Contact/Location: Joseph Rodgers - LIEMIS





**Graphs** 

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Contact/Location: Joseph Rodgers - LIEMIS