LIEBHERR





[HR DOOREKAMP] LIEBHERR LH120C 057245-1103 - Diesel Engine

Sample No: LH0276311

Silicon

Sodium

Potassium

Oil Type: PETRO CANADA 10W30

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SAMPLE INFORMATION									
Sample Number		LH0276311	LH0125931	LH0118769					
Sample Date		25 Mar 2024	23 Apr 2018	24 Nov 2017					
Machine Hours		9643	2776	2198					
Oil Hours		0	0	0					
Oil Changed		Not Changd	Changed	Changed					
Sample Status		NORMAL	NORMAL	NORMAL					
OIL CONDITION									
Visc @ 40°C	cSt			70.2					
Visc @ 100°C	cSt	11.2	10.7	○ 10.9					
Viscosity Index (VI)	Scale			145					
Oxidation (PA)	%	55	59	O 61					
	4								
CONTAMINATION									
Water	%	NEG	NEG	NEG					
Soot %	%	0	0.2	0.2					
Nitration (PA)	%	44	54	68					
Sulfation (PA)	%	50		6 7					
Glycol	%	NEG	NEG	NEG					
Fuel	%	<1.0	<1.0	0.0					

F: (905)319-6617 Diagnosis

LIEBHERR CANADA LTD.

1015 SUTTON DRIVE
BURLINGTON, ON
CA L7L 5Z8
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T: (905)319-9222

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.

(O) WE								
WEAR METALS								
Iron	ppm	5	O 5	0 8				
Copper	ppm	() <1	2	3				
Lead	ppm	0	<1	O <1				
Tin	ppm	0	O 0	O <1				
Aluminum	ppm	 <1	1	O 2				
Chromium	ppm	() <1	O <1	O <1				
Molybdenum	ppm	59	O 62	5 3				
Nickel	ppm	() <1	O <1	1				
Titanium	ppm	0	<1	<1				
Silver	ppm	0	0	0				
Manganese	ppm	0		O <1				
Vanadium	ppm	0	0	0				

3

0									
ADDITIVES									
Calcium	ppm	1051	O 1119						
Magnesium	ppm	977	969	○ 819					
Zinc	ppm	1185	1270	O 1282					
Phosphorus	ppm	1005	O 1071	1044					
Barium	ppm	0	O <1	O <1					
Boron	ppm	1	O 1	○ 3					

Depot:LIEMISUnique No:5749982Signed:Wes DavisReport Date:27 Mar 2024

2

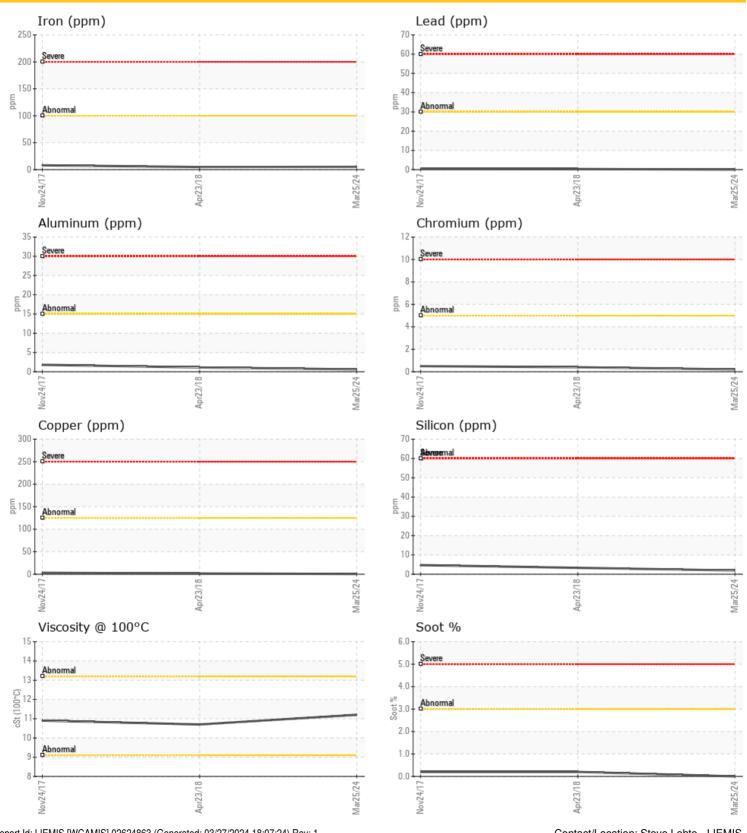
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ppm





GRAPHS



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Contact/Location: Steve Lehto - LIEMIS