

[[SUNBECK]] C17391 (S/N 68573) - Diesel Engine

Sample No: LH0217129

Oil Type: DIESEL ENGINE OIL 10W40

SAMPLE INFORMATION

Sample Number	LH0217129	 	
Sample Date	07 Mar 2024	 	
Machine Hours	986	 	
Oil Hours	986	 	
Oil Changed	Changed	 	
Sample Status	ABNORMAL	 	

104

OIL CONDITION Visc @ 100°C cSt 0 10.8 Base Number (BN) mg KOH/g 0 6.9

Base Number (BN)	mg KOH/g
Oxidation (PA)	%

-

	AMINATIO	DN		
Water	%	NEG	 	
Soot %	%	0.5	 	
Nitration (PA)	%	109	 	
Sulfation (PA)	%	73	 	
Glycol	%	NEG	 	
Fuel	%	0 1.0	 	
Silicon	ppm	0 15	 	
Sodium	ppm	07	 	
Potassium	ppm	0 4	 	

		•		
Iron	ppm	88	 	
Copper	ppm	<u> </u>	 	
Lead	ppm	04	 	
Tin	ppm	04	 	
Aluminum	ppm	06	 	
Chromium	ppm	2	 	
Molybdenum	ppm	258	 	
Nickel	ppm	6	 	
Titanium	ppm	<1	 	
Silver	ppm	0 0	 	
Manganese	ppm	06	 	
Vanadium	ppm	<1	 	

0				
	TIVES			
Calcium	ppm	0 1517	 	
Magnesium	ppm	0 833	 	
Zinc	ppm	0 1208	 	
Phosphorus	ppm	0 1058	 	
Barium	ppm	02	 	
Boron	ppm	26	 	





NUECES POWER EQUIPMENT

7333 MONROE RD HOUSTON, TX US 77061 Contact: JAMES GATHERCOLE james.gath@npetex.com T: (713)636-4030 F: (713)636-4039

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other metal levels are typical for a new component breaking in. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

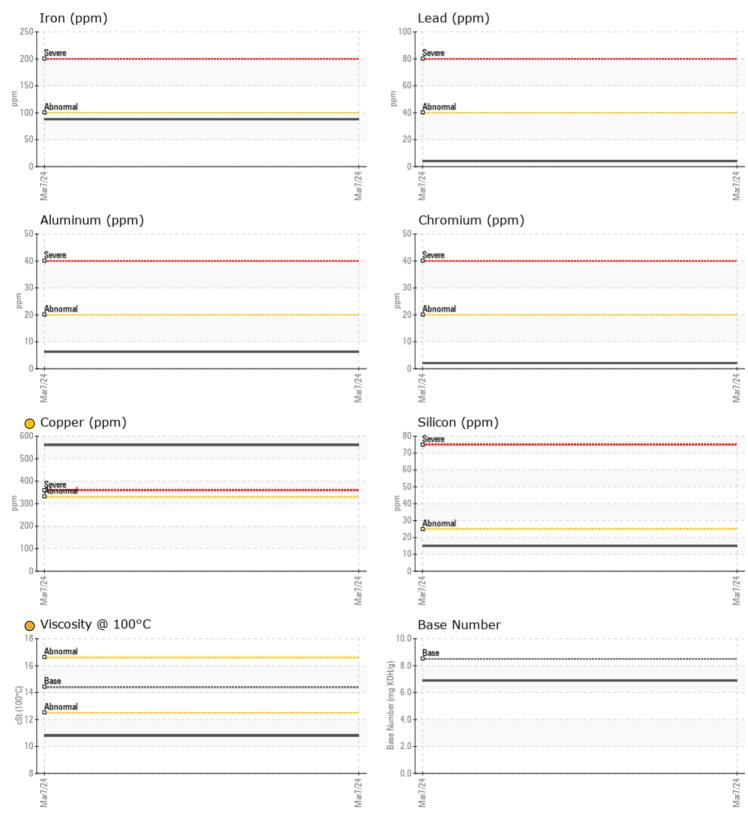
Depot:LIEBHERRTXUnique No:10939633Signed:Jonathan HesterReport Date:26 Mar 2024

CONSTRUCTION EQUIPMENT



GRAPHS

 $\overline{\mathbf{O}}$



Report Id: LIEBHERRTX [WUSCAR] 06125482 (Generated: 03/26/2024 18:15:13) Rev: 1

Contact/Location: JAMES GATHERCOLE - LIEBHERRTX