LIEBHERR

CONSTRUCTION EQUIPMENT

[SUBLATUS] LIEBHERR R93454888 - Diesel Engine

Sample No: LH0225020

Oil Type: Diesel Engine Oil



CONTAMINATION					
Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0	O 0	0
Nitration (PA)	%	88	83	89	103
Sulfation (PA)	%	62	64	65	114
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	1.3	O 1.2	<1.0	O 1
Silicon	ppm	8	8	8	10
Sodium	ppm	5		5	3
Potassium	ppm	2	1	O 0	O 2

WEA	R METALS				
Iron	ppm	7	6	7	O 13
Copper	ppm	5	O 14	102	O 265
Lead	ppm	6	O 1	4	9
Tin	ppm	0 <1	O <1	O <1	02
Aluminum	ppm	2	O <1	O 1	3
Chromium	ppm	0 <1	O <1	O <1	O <1
Molybdenum	ppm	60	S 58	58	47
Nickel	ppm	0	0	0 0	O <1
Titanium	ppm	0	0	0	<1
Silver	ppm	0	O 0	O <1	O 0
Manganese	ppm	0 0	<1	0	1
Vanadium	ppm	0	0	0	0

ADDITIVES						
Calcium	ppm	852	○ 831	923	O 1365	
Magnesium	ppm	1147	O 1140	O 1145	O 948	
Zinc	ppm	1244	O 1227	O 1249	○ 886	
Phosphorus	ppm	1033	O 1063	O 1014	O 797	
Barium	ppm	0	O <1	3	O 26	
Boron	ppm	25	O 26	37	89	



LIEBHERR CANADA LTD.

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Diagnosis

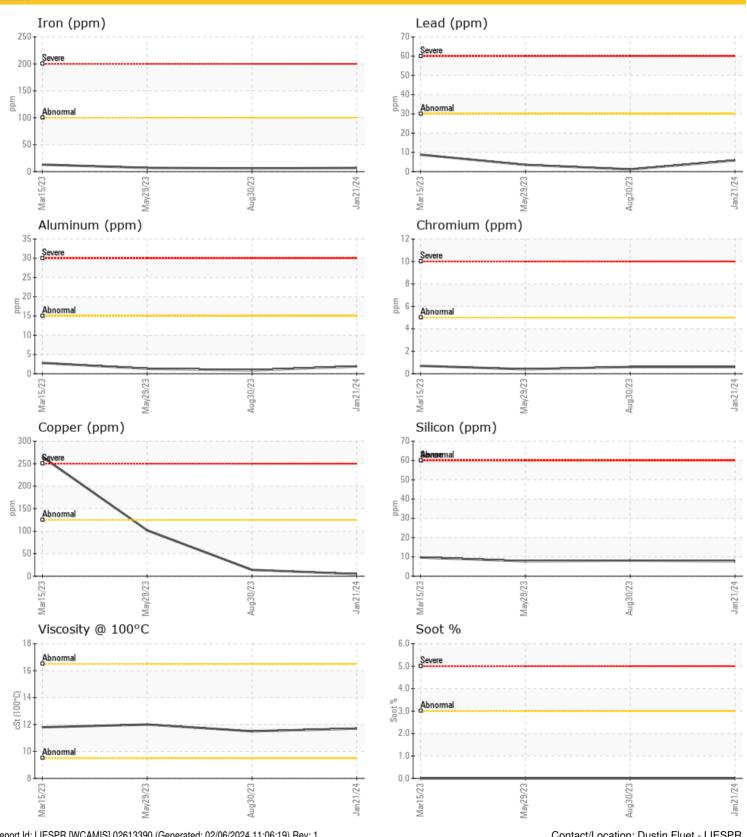
The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. Please specify the brand, type, and viscosity of the oil on your next sample.All component wear rates are normal. Light fuel dilution occurring. No other contaminants were detected in the oil. The condition of the oil is acceptable for the time in service.

Depot:LIESPRUnique No:5722485Signed:Bill QuesnelReport Date:06 Feb 2024





GRAPHS



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Contact/Location: Dustin Fluet - LIESPR