LIEBHERR

CONSTRUCTION EQUIPMENT

LIEBHERR R944C018096-793 - Left Final Drive

Sample No: LH0270434

Oil Type: PETRO CANADA TRAXON SYNTHETIC 75W90

O SAN	DLF INFO	DRMATION			
Sample Number		LH0270434	LH0192814	LH0222739	LH0195669
Sample Date		20 Sep 2023	12 Jul 2022	28 Jan 2022	21 Jun 2021
Machine Hours		25291	23797	23267	22261
Oil Hours		0	0	0	0
Oil Changed		Changed	Not Changd	Changed	Changed
Sample Status		SEVERE	NORMAL	SEVERE	ABNORMAL
<u> </u>	ONDITIO		NONIVIAL	SEVENE	ADNORWAL
/isc @ 40°C	cSt	○ 57.4	95.9	73.5	O 69.1
	001	01.4	0 00.0	0 70.0	0 00.1
CON	TAMINA	TION			
Vater	%	0.912		3.214	0.488
Silicon	ppm	2468	O 155	1252	<u>516</u>
Sodium	ppm	108	O 9	O 68	O 28
Potassium	ppm	193	O 21	O 143	O 56
WEA	IR META	0		933	
ron	ppm	5933	O 505	2916	O 1262
Copper	ppm	217	35	166	O 52
-ead	ppm	<u> </u>	O 4	21	0 8
- Fin	ppm	0 11	O 1	0 14	O 3
Aluminum	ppm	470	0 50	0 331	0 132
Chromium	ppm	89	0 9	58	O 26
Molybdenum	ppm	O 9	O 1	O 10	O 10
Nickel	ppm	1 9	O 1	0 12	O 5
Fitanium	ppm	29	O 3	0 24	O 10
Silver	ppm	0	0	<1	<1
Manganese	ppm	O 57	5	31	12
/anadium	ppm	1	<1	1	<1
	ITIVES		, , , , , , , , , , , , , , , , , , ,	·	
Calcium	ppm	1677	O 239	1753	894
Magnesium	ppm	286	33	317	197
Zinc	ppm	O 368	40	403	437
Phosphorus	ppm	0 829	1280	O 1225	0 1115
Barium	ppm	0 6	0 <1	0 0	02
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GERDAU METALS 5402 OLD RICHMOND RD NEPEAN, ON CA K2R 1G7 Contact: Service Manager

T: F:

Diagnosis

We advise that you check for the source of water entry. We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. Aluminum, chromium and copper, iron, nickel and titanium ppm levels are severe. Lead, tin ppm levels are abnormal. Bearing and/or bushing wear is indicated. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. There is a moderate concentration of water present in the oil. High concentration of dirt present in the oil. High amount of ingressed dirt has caused abrasive wear to the component. Viscosity of sample indicates oil is within SAE 20 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: GER540NEP
Unique No: 5645790
Signed: Bill Quesnel
Report Date: 26 Sep 2023

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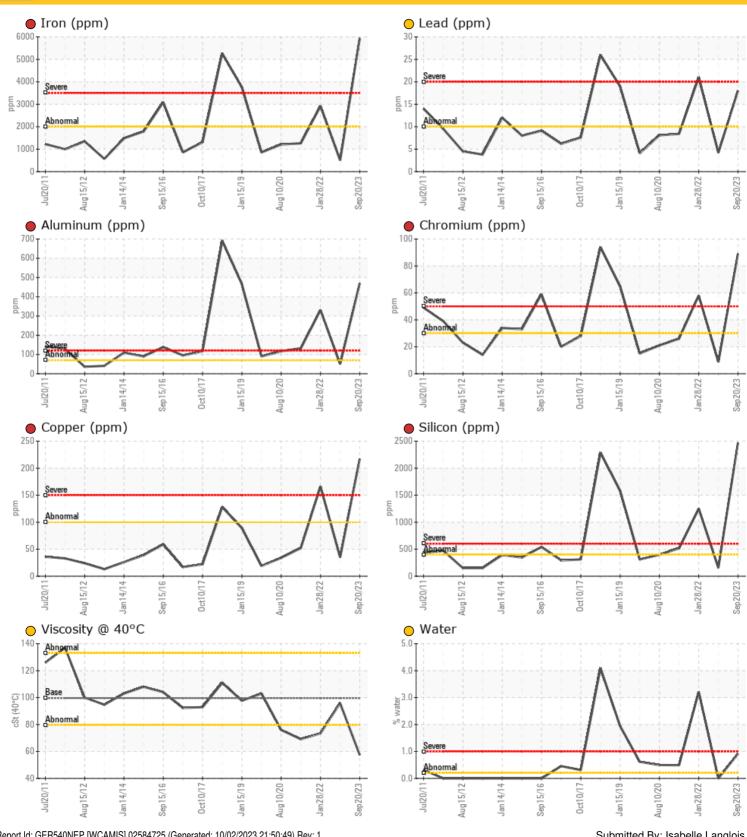
ppm

Boron





GRAPHS



Report Id: GER540NEP [WCAMIS] 02584725 (Generated: 10/02/2023 21:50:49) Rev: 1

Submitted By: Isabelle Langlois