

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR R944C 018096-793 - Left Final Drive

Sample No: LH0270434

Oil Type: PETRO CANADA TRAXON SYNTHETIC 75W90



SAMPLE INFORMATION

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

GERDAU METALS

5402 OLD RICHMOND RD
NEPEAN, ON
CA K2R 1G7
Contact: Service Manager



OIL CONDITION

Visc @ 40°C	cSt	57.4	95.9	73.5	69.1
-------------	-----	------	------	------	------

T:
F:



CONTAMINATION

Water	%	0.912	---	3.214	0.488
Silicon	ppm	2468	155	1252	516
Sodium	ppm	108	9	68	28
Potassium	ppm	193	21	143	56



WEAR METALS

PQ		0	---	933	---
Iron	ppm	5933	505	2916	1262
Copper	ppm	217	35	166	52
Lead	ppm	18	4	21	8
Tin	ppm	11	1	14	3
Aluminum	ppm	470	50	331	132
Chromium	ppm	89	9	58	26
Molybdenum	ppm	9	1	10	10
Nickel	ppm	19	1	12	5
Titanium	ppm	29	3	24	10
Silver	ppm	0	0	<1	<1
Manganese	ppm	57	5	31	12
Vanadium	ppm	1	<1	1	<1



ADDITIVES

Calcium	ppm	1677	239	1753	894
Magnesium	ppm	286	33	317	197
Zinc	ppm	368	40	403	437
Phosphorus	ppm	829	1280	1225	1115
Barium	ppm	6	<1	0	2
Boron	ppm	155	165	217	190

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

LIEBHERR

CONSTRUCTION EQUIPMENT



GRAPHS

