

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR R944C 018096-793 - Right Final Drive

Sample No: LH0270437

Oil Type: PETRO CANADA TRAXON 75W90 SYNTHETIC



SAMPLE INFORMATION

Sample Number	LH0270437	LH0195622	LH0222740	LH0195668
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	N/A	Not Changd	Changed	Changed
Sample Status	SEVERE	SEVERE	ABNORMAL	NORMAL

GERDAU METALS

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



OIL CONDITION

Visc @ 40°C	cSt	90.9	80.1	93.6	94.0
-------------	-----	------	------	------	------

T:
F:



CONTAMINATION

Water	%	---	---	0.320	---
Silicon	ppm	669	619	410	68
Sodium	ppm	33	34	21	5
Potassium	ppm	67	75	63	8

Diagnosis

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. Copper ppm levels are abnormal. Aluminum ppm levels are noted. Bearing and/or bushing wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component. Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.



WEAR METALS

Iron	ppm	1523	1355	939	229
Copper	ppm	149	132	38	16
Lead	ppm	8	15	7	2
Tin	ppm	4	6	2	<1
Aluminum	ppm	147	184	131	18
Chromium	ppm	26	22	19	8
Molybdenum	ppm	3	4	3	2
Nickel	ppm	5	4	3	<1
Titanium	ppm	7	11	9	1
Silver	ppm	<1	0	<1	<1
Manganese	ppm	16	13	10	2
Vanadium	ppm	<1	<1	<1	<1



ADDITIVES

Calcium	ppm	448	909	641	86
Magnesium	ppm	72	147	87	22
Zinc	ppm	70	246	62	40
Phosphorus	ppm	1259	1159	1431	1228
Barium	ppm	2	2	0	<1
Boron	ppm	183	133	242	236

Depot: GER540NEP
Unique No: 5645785
Signed: Bill Quesnel
Report Date: 25 Sep 2023



GRAPHS

