

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR R944CR944C - Swing Drive

Sample No: LH0224642

Oil Type: CATALYS 80W90



SAMPLE INFORMATION

Sample Number	LH0224642	LH0224635	LH0178476	LH0178470
Sample Date	19 Oct 2023	23 Sep 2022	01 Oct 2021	03 Dec 2020
Machine Hours	16000	1000	1000	1010
Oil Hours	1000	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	ABNORMAL	NORMAL	NORMAL

CRAWFORD METAL CORPORATION
 300 COLLEGE STREET EAST
 BELLEVILLE, ON
 CA K8N 5B3
 Contact: Shawna Geen
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OIL CONDITION

Visc @ 40°C	cSt	132	136	135	143
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CONTAMINATION

Water	%	0.643	---	---	0.022
Silicon	ppm	6	5	6	3
Sodium	ppm	<1	<1	<1	<1
Potassium	ppm	<1	0	<1	<1



WEAR METALS

Iron	ppm	373	393	657	548
Copper	ppm	17	24	48	30
Lead	ppm	<1	1	1	<1
Tin	ppm	<1	<1	2	2
Aluminum	ppm	<1	<1	<1	<1
Chromium	ppm	4	5	7	7
Molybdenum	ppm	0	<1	<1	2
Nickel	ppm	1	2	2	2
Titanium	ppm	0	0	0	0
Silver	ppm	<1	0	<1	<1
Manganese	ppm	2	3	4	4
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	15	3	6	20
Magnesium	ppm	<1	<1	1	7
Zinc	ppm	18	6	8	15
Phosphorus	ppm	505	531	615	336
Barium	ppm	<1	0	0	0
Boron	ppm	5	6	9	10

Diagnosis

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate concentration of water present in the oil. The oil is no longer serviceable due to the presence of contaminants.

Depot: CRABEL
 Unique No: 5668179
 Signed: Kevin Marson
 Report Date: 25 Oct 2023

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GRAPHS

