

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR 80368 - Gearbox

Sample No: LH0170959

Oil Type: PETRO CANADA 15W40

J.D. Irving

290 MAIN STREET, ATTN: GREG BEST
CHIPMAN, NB

CA E4A 2M7

Contact: Greg Best

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F:

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. Copper ppm levels are severe. Bearing and/or bushing wear is indicated. There is a moderate concentration of water present in the oil. Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The oil is no longer serviceable as a result of the abnormal and/or severe wear.



Sample Information

Sample Number		LH0170959	LH0145538	---	---
Sample Date		21 Apr 2020	14 Apr 2020	---	---
Machine Hours		15599	15500	---	---
Oil Hours		0	0	---	---
Oil Changed		Changed	Changed	---	---
Sample Status		SEVERE	SEVERE	---	---



Oil Condition

Visc @ 40°C	cSt	● 75.0	● 70.1	---	---
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Contamination

Water	%	● 0.593	● 1.284	---	---
Silicon	ppm	● 8	● 14	---	---
Sodium	ppm	● 2	● 5	---	---
Potassium	ppm	● <1	● 1	---	---



Wear Metals

PQ		---	● 72	---	---
Iron	ppm	● 114	● 212	---	---
Copper	ppm	● 1167	● 1579	---	---
Lead	ppm	● 30	● 40	---	---
Tin	ppm	● 5	● 8	---	---
Aluminum	ppm	● 3	● 4	---	---
Chromium	ppm	● 1	● 2	---	---
Molybdenum	ppm	● 58	● 55	---	---
Nickel	ppm	0	0	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	<1	<1	---	---
Manganese	ppm	● 10	● 18	---	---
Vanadium	ppm	<1	<1	---	---



Additives

Calcium	ppm	● 987	● 997	---	---
Magnesium	ppm	● 911	● 909	---	---
Zinc	ppm	● 1175	● 1208	---	---
Phosphorus	ppm	● 1136	● 1218	---	---
Barium	ppm	● <1	● <1	---	---
Boron	ppm	● 19	● 47	---	---

Depot: JDICHI
 Unique No: 5033697
 Signed: Kevin Marson
 Report Date: 27 Apr 2020
 Contact/Location: Greg Best - JDICHI



Graphs

