

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH50M 086015-1203 - Transmission (Manual)

Sample No: LH0278358

Oil Type: PETRO CANADA 15W40



#### SAMPLE INFORMATION

Sample Number	LH0278358	LH0234496	LH0137157	LH0121288
Sample Date	28 Nov 2023	27 Jun 2022	07 Mar 2019	13 Feb 2018
Machine Hours	20736	17693	10268	5271
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	ABNORMAL	NORMAL	NORMAL

**Dartmouth Metals & Bottle Ltd.**  
 14 Dawn Drive  
 Dartmouth, NS  
 CA B3B 1H9  
 Contact: Service



#### OIL CONDITION

Visc @ 40°C	cSt	79.8	86.8	48.8	42.0

T:  
F:



#### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	4	2	5	4
Sodium	ppm	3	2	11	35
Potassium	ppm	<1	10	4	1

#### Diagnosis

The fluid change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Copper ppm levels are abnormal. Clutch disc wear or oil cooler leaching indicated. There is no indication of any contamination in the fluid. Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The fluid is no longer serviceable as a result of the abnormal and/or severe wear.



#### WEAR METALS

PQ		---	---	85	26
Iron	ppm	34	29	208	206
Copper	ppm	301	5	49	183
Lead	ppm	10	<1	1	7
Tin	ppm	<1	<1	1	2
Aluminum	ppm	4	1	6	7
Chromium	ppm	0	0	<1	<1
Molybdenum	ppm	54	27	38	<1
Nickel	ppm	0	0	<1	<1
Titanium	ppm	0	0	0	<1
Silver	ppm	0	0	0	0
Manganese	ppm	3	1	11	30
Vanadium	ppm	0	0	0	<1



#### ADDITIVES

Calcium	ppm	960	513	1608	3194
Magnesium	ppm	812	434	600	9
Zinc	ppm	1050	565	1099	1081
Phosphorus	ppm	1097	1153	978	1067
Barium	ppm	<1	0	0	1
Boron	ppm	23	164	3	3

Depot: DAR14DAR  
 Unique No: 5708973  
 Signed: Kevin Marson  
 Report Date: 11 Jan 2024



### GRAPHS

