

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH30M 072023-1200 - Diesel Engine

Sample No: LH0256818

Oil Type: PETRO CANADA 10W30



Peel Scrap Metal Recycling
 1150 South Service Rd
 Oakville, ON
 CA L6L 5T7
 Contact: Service Manager



Sample Information

Sample Number	LH0256818	LH0227423	LH0185990	LH0133896
Sample Date	24 May 2023	01 Apr 2022	03 Feb 2021	03 Dec 2018
Machine Hours	11347	10095	9113	7615
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Not Changd	Changed
Sample Status	ABNORMAL	NORMAL	NORMAL	NORMAL



Oil Condition

Visc @ 100°C	cSt	11.5	11.9	10.4	13.8
Oxidation (PA)	%	65	53	54	71



Contamination

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.4	0.1	0.1	0
Nitration (PA)	%	82	71	66	58
Sulfation (PA)	%	60	60	51	55
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	0.7	<1.0
Silicon	ppm	14	8	8	9
Sodium	ppm	9	27	20	16
Potassium	ppm	8	5	2	2



Wear Metals

Iron	ppm	23	39	13	12
Copper	ppm	10	15	9	6
Lead	ppm	2	6	2	<1
Tin	ppm	<1	1	<1	0
Aluminum	ppm	16	12	6	8
Chromium	ppm	<1	1	<1	0
Molybdenum	ppm	55	42	54	6
Nickel	ppm	<1	<1	<1	<1
Titanium	ppm	<1	0	<1	0
Silver	ppm	<1	<1	<1	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



Additives

Calcium	ppm	1145	1585	1110	1551
Magnesium	ppm	898	595	903	625
Zinc	ppm	1169	1101	1127	844
Phosphorus	ppm	972	898	904	721
Barium	ppm	0	0	<1	0
Boron	ppm	2	3	14	132

T:
F:

Diagnosis

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Aluminum ppm levels are abnormal. Piston wear is indicated. There is no indication of any contamination in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: PEEOAK
 Unique No: 5580428
 Signed: Kevin Marson
 Report Date: 25 May 2023



Graphs

