

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH30M 1253-145780 - Diesel Engine

Sample No: LH0276602

Oil Type: PETRO CANADA DURON UHP 5W30



TRAM CONSTRUCTION
 9279 E KY 8
 GARRISON, KY
 US 41141
 Contact: Service Manager

T:
 F:



SAMPLE INFORMATION

Sample Number	LH0276602	---	---	---
Sample Date	01 Oct 2023	---	---	---
Machine Hours	520	---	---	---
Oil Hours	520	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---



OIL CONDITION

Visc @ 100°C	cSt	11.5	---	---	---
Base Number (BN)	mg KOH/g	3.8	---	---	---
Oxidation (PA)	%	211	---	---	---



CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	0.1	---	---	---
Nitration (PA)	%	101	---	---	---
Sulfation (PA)	%	110	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	10	---	---	---
Sodium	ppm	0	---	---	---
Potassium	ppm	5	---	---	---



WEAR METALS

Iron	ppm	15	---	---	---
Copper	ppm	276	---	---	---
Lead	ppm	3	---	---	---
Tin	ppm	2	---	---	---
Aluminum	ppm	4	---	---	---
Chromium	ppm	2	---	---	---
Molybdenum	ppm	47	---	---	---
Nickel	ppm	<1	---	---	---
Titanium	ppm	1	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	1	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	1347	---	---	---
Magnesium	ppm	914	---	---	---
Zinc	ppm	886	---	---	---
Phosphorus	ppm	746	---	---	---
Barium	ppm	36	---	---	---
Boron	ppm	92	---	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The BN level is low. The condition of the oil is acceptable for the time in service.

Depot: TRAGARLH
 Unique No: 10805984
 Signed: Jonathan Hester
 Report Date: 27 Dec 2023



GRAPHS

