

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH30M 1253-144576 - Diesel Engine

Sample No: LH0276413

Oil Type: PETRO CANADA DURON UHP 5W40



SAMPLE INFORMATION

Sample Number	LH0276413	LH0276410	---	---
Sample Date	25 Mar 2024	10 Oct 2023	---	---
Machine Hours	1155	540	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ATTENTION	ABNORMAL	---	---

TRAM CONSTRUCTION

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



OIL CONDITION

Visc @ 100°C	cSt	11.1	11.4	---	---
Base Number (BN)	mg KOH/g	7.8	5.1	---	---
Oxidation (PA)	%	98	200	---	---

T:
F:



CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0.1	0.1	---	---
Nitration (PA)	%	79	102	---	---
Sulfation (PA)	%	60	108	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	1.1	<1.0	---	---
Silicon	ppm	8	15	---	---
Sodium	ppm	0	0	---	---
Potassium	ppm	2	5	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.



WEAR METALS

Iron	ppm	7	13	---	---
Copper	ppm	57	270	---	---
Lead	ppm	1	2	---	---
Tin	ppm	2	1	---	---
Aluminum	ppm	1	2	---	---
Chromium	ppm	1	<1	---	---
Molybdenum	ppm	46	46	---	---
Nickel	ppm	<1	0	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	<1	<1	---	---
Vanadium	ppm	<1	0	---	---



ADDITIVES

Calcium	ppm	1288	1322	---	---
Magnesium	ppm	844	892	---	---
Zinc	ppm	877	850	---	---
Phosphorus	ppm	763	686	---	---
Barium	ppm	4	19	---	---
Boron	ppm	114	84	---	---

Depot: TRAGARLH
Unique No: 10949837
Signed: Jonathan Hester
Report Date: 02 Apr 2024



GRAPHS

