



LIEBHERR L580 038365-1170 - Diesel Engine

Sample No: LH0137238

Oil Type: PT



INFORMATION SUR L'ÉCHANTILLON

Numéro d'échant.	LH0137238	LH0107626	LH0088069	---
Date d'échant.	30 Jan 2019	17 Jun 2016	09 Jun 2016	---
Heures de la Machine	10625	2618	2550	---
Heures de l'huile	0	0	0	---
Huile changée	Changed	Changed	Changed	---
Statut de l'échant.	SEVERE	SEVERE	ABNORMAL	---

LIEBHERR CANADA LTD.

1015 SUTTON DRIVE
BURLINGTON, ON
CA L7L 5Z8

Contact: Steve Lehto
steve.lehto@liebherr.com
T: (905)319-9222
F: (905)319-6617



ÉTAT D'HUILE

Visc 100°C	cSt	● 4.9	● 12.1	● 11.9	---
Indice d'alcalinité	mg KOH/g	---	● 10.21	---	---
Oxydation (PA)	%	● 79	● 94	● 94	---



CONTAMINATION

Eau	%	NEG	NEG	NEG	---
% de suie	%	● 1.1	● 0.3	● 0.2	---
Nitration (PA)	%	● 109	● 94	● 86	---
Sulfatation (PA)	%	● 58	● 68	● 67	---
Glycol	%	● 0.0	● 0.10	● 0.0	---
Essence	%	● 25.1	<1.0	<1.0	---
Silicium	ppm	● 8	● 7	● 6	---
Sodium	ppm	● 62	● 540	● 361	---
Potassium	ppm	● 16	● 49	● 40	---



MÉTAUX D'USURE

Fer	ppm	● 93	● 10	● 8	---
Cuivre	ppm	● 5	● 1	● 2	---
Plomb	ppm	● 1	● <1	● <1	---
Étain	ppm	● <1	● <1	● <1	---
Aluminium	ppm	● 27	● 3	● 2	---
Chrome	ppm	● 2	● <1	● <1	---
Molybdène	ppm	● 4	● 25	● 15	---
Nickel	ppm	● <1	● <1	● 0	---
Titane	ppm	<1	<1	<1	---
Argent	ppm	0	0	0	---
Manganèse	ppm	1	<1	<1	---
Vanadium	ppm	0	<1	0	---



ADDITIFS

Calcium	ppm	● 1670	● 2367	2397	---
Magnésium	ppm	● 62	● 79	80	---
Zinc	ppm	● 541	● 767	● 780	---
Phosphore	ppm	● 475	● 688	● 700	---
Baryum	ppm	● <1	● <1	● <1	---
Bore	ppm	● 1	● 16	12	---

Diagnostic

We advise that you check the fuel injection system. 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 a high amount of fuel present in the oil. Test for glycol is negative. Tests confirm the presence of fuel in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: LIEMIS
Unique No: 4821718
Signed: Kevin Marson
Report Date: 11 Feb 2019

Contact/Location: Steve Lehto - LIEMIS



GRAPHS

