

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50M 084148-1203 - Diesel Engine

Sample No: LH0274290

Oil Type: SAE 5W40



SAMPLE INFORMATION

Sample Number	LH0274290	LH0260785	LH	LH
Sample Date	09 Jun 2023	09 Jun 2023	24 Mar 2023	10 May 2022
Machine Hours	10974	0	10103	0
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	ABNORMAL

QIT - Rio Tinto Fer et Titane Inc.

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OIL CONDITION

Visc @ 100°C	cSt	13.9	11.9	12.2	13.0
Oxidation (PA)	%	65	76	74	72



CONTAMINATION

Soot %	%	0.8	0.4	0.3	0.4
Nitration (PA)	%	88	89	99	99
Sulfation (PA)	%	57	57	64	65
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	6	6	8
Sodium	ppm	3	5	4	4
Potassium	ppm	14	1	<1	4



WEAR METALS

Iron	ppm	13	10	15	50
Copper	ppm	7	6	10	211
Lead	ppm	2	<1	<1	8
Tin	ppm	<1	<1	<1	1
Aluminum	ppm	10	8	11	19
Chromium	ppm	<1	<1	<1	2
Molybdenum	ppm	61	59	46	51
Nickel	ppm	0	<1	<1	<1
Titanium	ppm	0	<1	<1	<1
Silver	ppm	<1	0	0	<1
Manganese	ppm	0	<1	<1	1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1029	938	1305	1312
Magnesium	ppm	990	1041	834	806
Zinc	ppm	1190	1230	1223	1196
Phosphorus	ppm	1030	1087	1114	958
Barium	ppm	<1	0	0	3
Boron	ppm	3	30	21	2

Diagnosis

Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition. Les taux d'usure de tous les composants sont normaux. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Il n'y a aucun indice de contamination dans l'huile. L'état de l'huile est acceptable pour la durée de service.

Depot: QITGARAGE

Unique No: 5658258

Signed: Wes Davis

Report Date: 16 Oct 2023



GRAPHS

