

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [(339749)] 068411-1203 - Diesel Engine

Sample No: LH0274127

Oil Type: PETRO CANADA 10W40



#### SAMPLE INFORMATION

Sample Number	LH0274127	LH0221490	---	---
Sample Date	14 Sep 2023	19 Jan 2022	---	---
Machine Hours	17217	0	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ABNORMAL	NORMAL	---	---

#### American Iron and Metal

2291 Avenue Larivieres  
Rouyn-Noranda, QC  
CA J9Y 0G7  
Contact: Service Manager



#### OIL CONDITION

Visc @ 100°C	cSt	12.1	11.2	---	---
Oxidation (PA)	%	93	45	---	---

T:  
F:



#### CONTAMINATION

Soot %	%	0.5	0	---	---
Nitration (PA)	%	129	48	---	---
Sulfation (PA)	%	62	43	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	0.5	---	---
Silicon	ppm	12	9	---	---
Sodium	ppm	10	15	---	---
Potassium	ppm	4	3	---	---

#### Diagnosis

Nous avons pris note que la vidange d'huile a été effectuée au moment de l'échantillonnage. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation. Usure de cylindre, de vilebrequin ou d'arbre à cames. Usure de piston. Usure de palier. Il n'y a aucun indice de contamination dans l'huile. l'huile n'est plus en état de service en raison d'une usure anormale et/ou sévère.



#### WEAR METALS

Iron	ppm	83	17	---	---
Copper	ppm	120	9	---	---
Lead	ppm	5	2	---	---
Tin	ppm	3	<1	---	---
Aluminum	ppm	10	5	---	---
Chromium	ppm	3	<1	---	---
Molybdenum	ppm	59	48	---	---
Nickel	ppm	<1	<1	---	---
Titanium	ppm	0	<1	---	---
Silver	ppm	1	<1	---	---
Manganese	ppm	1	<1	---	---
Vanadium	ppm	0	0	---	---



#### ADDITIVES

Calcium	ppm	936	1464	---	---
Magnesium	ppm	1076	948	---	---
Zinc	ppm	1244	1231	---	---
Phosphorus	ppm	1011	1070	---	---
Barium	ppm	8	19	---	---
Boron	ppm	21	91	---	---

Depot: AIMROU  
Unique No: 5646483  
Signed: Kevin Marson  
Report Date: 28 Sep 2023



### GRAPHS

