

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR 049819 - Diesel Engine

Sample No: LH0270359

Oil Type: PETRO CANADA SUPREME 5W30



#### SAMPLE INFORMATION

Sample Number	LH0270359	LH0251888	---	---
Sample Date	31 Jul 2023	19 Jan 2023	---	---
Machine Hours	10949	10083	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	NORMAL	NORMAL	---	---

**MONAGHAN MUSHROOMS LTD**  
 7345 GUELPH LINE  
 CAMPBELLVILLE, ON  
 CA L0P 1B0  
 Contact: Steven Cargill  
 s.cargill@monaghan-mushrooms.com  
 T:  
 F:



#### OIL CONDITION

Visc @ 100°C	cSt	11.8	10.9	---	---
Oxidation (PA)	%	64	71	---	---



#### CONTAMINATION

Soot %	%	0	0	---	---
Nitration (PA)	%	66	111	---	---
Sulfation (PA)	%	53	65	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	1.7	---	---
Silicon	ppm	6	6	---	---
Sodium	ppm	4	3	---	---
Potassium	ppm	<1	1	---	---

#### Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.



#### WEAR METALS

Iron	ppm	4	15	---	---
Copper	ppm	2	5	---	---
Lead	ppm	0	5	---	---
Tin	ppm	0	<1	---	---
Aluminum	ppm	1	2	---	---
Chromium	ppm	<1	<1	---	---
Molybdenum	ppm	56	27	---	---
Nickel	ppm	0	<1	---	---
Titanium	ppm	0	<1	---	---
Silver	ppm	<1	0	---	---
Manganese	ppm	<1	<1	---	---
Vanadium	ppm	0	0	---	---



#### ADDITIVES

Calcium	ppm	848	2962	---	---
Magnesium	ppm	1083	141	---	---
Zinc	ppm	1185	1013	---	---
Phosphorus	ppm	1059	958	---	---
Barium	ppm	0	0	---	---
Boron	ppm	29	126	---	---

Depot: MONCAM  
 Unique No: 5618699  
 Signed: Wes Davis  
 Report Date: 02 Aug 2023



### GRAPHS

