

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR A944 079419 - Diesel Engine

Sample No: LH0292284

Oil Type: {unknown}



#### Sample Information

Sample Number	LH0292284	---	---	---
Sample Date	11 Jul 2024	---	---	---
Machine Hours	16752	---	---	---
Oil Hours	0	---	---	---
Oil Changed	N/A	---	---	---
Sample Status	SEVERE	---	---	---

#### Liebherr Canada

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 Richmond, BC  
 CA V6W 1J8  
 Contact: Kevin Steer  
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 T:  
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#### Oil Condition

Visc @ 100°C	cSt	5.9	---	---	---
Oxidation (PA)	%	76	---	---	---



#### Contamination

Water	%	NEG	---	---	---
Soot %	%	0.2	---	---	---
Nitration (PA)	%	101	---	---	---
Sulfation (PA)	%	23	---	---	---
Glycol	%	>.70	---	---	---
Fuel	%	33.7	---	---	---
Silicon	ppm	9	---	---	---
Sodium	ppm	231	---	---	---
Potassium	ppm	2	---	---	---

#### Diagnosis

We advise that you check the fuel injection system. We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. Test for glycol is positive. There is a high amount of fuel present in the oil. There is a high concentration of glycol present in the oil. There is a moderate concentration of water present in the oil. Tests confirm the presence of fuel in the oil. The oil is no longer serviceable due to the presence of contaminants.



#### Wear Metals

Iron	ppm	8	---	---	---
Copper	ppm	9	---	---	---
Lead	ppm	1	---	---	---
Tin	ppm	0	---	---	---
Aluminum	ppm	2	---	---	---
Chromium	ppm	<1	---	---	---
Molybdenum	ppm	12	---	---	---
Nickel	ppm	<1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	<1	---	---	---
Vanadium	ppm	0	---	---	---



#### Additives

Calcium	ppm	1051	---	---	---
Magnesium	ppm	5	---	---	---
Zinc	ppm	739	---	---	---
Phosphorus	ppm	518	---	---	---
Barium	ppm	<1	---	---	---
Boron	ppm	34	---	---	---

Depot: LIERIC  
 Unique No: 5813308  
 Signed: Kevin Marson  
 Report Date: 17 Jul 2024



### Graphs

