

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR R920 051529-1705 - Diesel Engine

Sample No: LH0225138

Oil Type: {unknown}



SHAMROCK EARTHWORKS LTD
 351 EVERSIDE WAY SW
 CALGARY, AB
 CA T2Y 4R2
 Contact: Service Manager



SAMPLE INFORMATION

Sample Number	LH0225138	LH0269734	---	---
Sample Date	24 Jan 2024	31 Aug 2023	---	---
Machine Hours	3129	2657	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	NORMAL	NORMAL	---	---



OIL CONDITION

Visc @ 100°C	cSt	11.8	12.1	---	---
Oxidation (PA)	%	84	83	---	---

T:
F:



CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0	0	---	---
Nitration (PA)	%	86	83	---	---
Sulfation (PA)	%	60	63	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	0.5	---	---
Silicon	ppm	11	28	---	---
Sodium	ppm	5	5	---	---
Potassium	ppm	<1	<1	---	---

Diagnosis

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. 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	19	18	---	---
Copper	ppm	4	4	---	---
Lead	ppm	<1	<1	---	---
Tin	ppm	0	0	---	---
Aluminum	ppm	2	<1	---	---
Chromium	ppm	<1	<1	---	---
Molybdenum	ppm	61	59	---	---
Nickel	ppm	<1	0	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	0	<1	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

Calcium	ppm	863	890	---	---
Magnesium	ppm	1155	1157	---	---
Zinc	ppm	1252	1272	---	---
Phosphorus	ppm	1058	1107	---	---
Barium	ppm	0	0	---	---
Boron	ppm	36	36	---	---

Depot: SHA351CAL
 Unique No: 5722442
 Signed: Bill Quesnel
 Report Date: 05 Feb 2024



GRAPHS

