

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR A913 143645-1824 - Front Right Wheel Hub

Sample No: LH0269792

Oil Type: LIEBHERR GEAR BASIC 90 LS



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



SAMPLE INFORMATION

Sample Number	LH0269792	---	---	---
Sample Date	28 Dec 2023	---	---	---
Machine Hours	643	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	NORMAL	---	---	---



OIL CONDITION

Visc @ 40°C	cSt	80.8	---	---	---
-------------	-----	------	-----	-----	-----

T:
F:



CONTAMINATION

Water	%	NEG	---	---	---
Silicon	ppm	51	---	---	---
Sodium	ppm	4	---	---	---
Potassium	ppm	8	---	---	---

Diagnosis

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within SAE 30 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.



WEAR METALS

Iron	ppm	113	---	---	---
Copper	ppm	18	---	---	---
Lead	ppm	<1	---	---	---
Tin	ppm	0	---	---	---
Aluminum	ppm	3	---	---	---
Chromium	ppm	2	---	---	---
Molybdenum	ppm	<1	---	---	---
Nickel	ppm	<1	---	---	---
Titanium	ppm	2	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	1	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	772	---	---	---
Magnesium	ppm	5	---	---	---
Zinc	ppm	1397	---	---	---
Phosphorus	ppm	689	---	---	---
Barium	ppm	2	---	---	---
Boron	ppm	100	---	---	---

Depot: SHA351CAL
 Unique No: 5707095
 Signed: Kevin Marson
 Report Date: 02 Jan 2024



GRAPHS

