

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH50M 144157-1216 - Front Differential

Sample No: LH0255451

Oil Type: LIEBHERR SYNTOGEAR PLUS 75W-90



CALGARY METALS (1985) LTD.
 3415 OGDEN RD. SE.
 CALGARY, AB
 CA T2G 4N4
 Contact: Steve Goodzeck
 sgoodzeck@calgarymetal.com
 T: (403)262-4542
 F:



Sample Information

Sample Number	LH0255451	LH0255439	LH0225083	---
Sample Date	21 Jun 2024	17 Nov 2023	15 Feb 2023	---
Machine Hours	3338	2077	472	---
Oil Hours	0	0	0	---
Oil Changed	N/A	N/A	Changed	---
Sample Status	NORMAL	NORMAL	NORMAL	---



Oil Condition

Visc @ 40°C	cSt	104	105	176	---
-------------	-----	-----	-----	-----	-----



Contamination

Water	%	NEG	NEG	NEG	---
Silicon	ppm	3	3	2	---
Sodium	ppm	<1	3	3	---
Potassium	ppm	<1	0	0	---



Wear Metals

Iron	ppm	5	4	4	---
Copper	ppm	45	34	4	---
Lead	ppm	<1	2	<1	---
Tin	ppm	0	0	0	---
Aluminum	ppm	<1	<1	0	---
Chromium	ppm	0	0	0	---
Molybdenum	ppm	0	0	0	---
Nickel	ppm	<1	0	<1	---
Titanium	ppm	0	0	0	---
Silver	ppm	0	<1	0	---
Manganese	ppm	<1	0	<1	---
Vanadium	ppm	0	0	0	---



Additives

Calcium	ppm	19	21	4	---
Magnesium	ppm	<1	2	<1	---
Zinc	ppm	29	26	6	---
Phosphorus	ppm	1234	1287	1371	---
Barium	ppm	5	5	295	---
Boron	ppm	316	330	32	---

Diagnosis

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as LIEBHERR SYNTOGEAR PLUS 75W-90, however, a fluid match indicates that this fluid is SAE 75W90 Gear Oil. Please confirm the oil type and grade on your next sample. All component wear rates are normal. There is no indication of any contamination in the oil. Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Depot: CAL341CAL
 Unique No: 5802210
 Signed: Kevin Marson
 Report Date: 02 Jul 2024



Graphs

