

LIEBHERR

CONSTRUCTION EQUIPMENT



054664-1650 - Left Final Drive

Sample No: LH0285105

Oil Type: GEAR OIL SAE 80W90



SAMPLE INFORMATION

Sample Number	LH0285105	LH	LH0239328	---
Sample Date	29 Jan 2024	28 Mar 2023	28 Sep 2022	---
Machine Hours	2022	1010	305	---
Oil Hours	0	0	0	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	SEVERE	NORMAL	NORMAL	---

Delsan - American Iron and Metal
 2187 Montee Masson
 Laval, QC
 CA H7B 0A6
 Contact: MANNY MARQUES
 mmarques@delsan-aim.com
 T:
 F:



OIL CONDITION

Visc @ 40°C	cSt	93.5	182	170	---
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CONTAMINATION

Water	%	NEG	NEG	NEG	---
Silicon	ppm	434	21	15	---
Sodium	ppm	20	5	7	---
Potassium	ppm	36	2	3	---



WEAR METALS

PQ		117	---	---	---
Iron	ppm	1494	68	211	---
Copper	ppm	1	0	<1	---
Lead	ppm	3	0	<1	---
Tin	ppm	0	0	0	---
Aluminum	ppm	125	6	6	---
Chromium	ppm	25	3	6	---
Molybdenum	ppm	1	0	<1	---
Nickel	ppm	2	<1	<1	---
Titanium	ppm	8	<1	<1	---
Silver	ppm	0	0	<1	---
Manganese	ppm	29	1	3	---
Vanadium	ppm	<1	0	0	---



ADDITIVES

Calcium	ppm	1190	23	62	---
Magnesium	ppm	162	2	4	---
Zinc	ppm	43	7	42	---
Phosphorus	ppm	1406	2220	2392	---
Barium	ppm	5	3	10	---
Boron	ppm	198	2	6	---

Diagnosis

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. Chromium and iron ppm levels are abnormal. Aluminum ppm levels are noted. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component. Viscosity of sample indicates oil is within SAE 75W90 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: DEL782MON
Unique No: 5721327
Signed: Bill Quesnel
Report Date: 31 Jan 2024



GRAPHS

