

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR R934CEW 030096 (S/N 30095) - Swing Drive

Sample No: LH0235020

Oil Type: KENDALL NS-MP HYPOID GEAR 80W90



SAMPLE INFORMATION

Sample Number	LH0235020	LH0195435	---	---
Sample Date	27 Oct 2022	20 Apr 2021	---	---
Machine Hours	17569	15200	---	---
Oil Hours	1000	1000	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	SEVERE	ABNORMAL	---	---

DOMINION NICKEL ALLOYS LTD.

834 APPLEBY LINE
BURLINGTON, ON
CA L7L 2Y7

Contact: Trevor Taylor
trevor@domnickel.com
T: (905)639-9939
F: (905)639-3788



OIL CONDITION

Visc @ 40°C	cSt	● 115	● 134	---	---
-------------	-----	-------	-------	-----	-----



CONTAMINATION

Water	%	NEG	NEG	---	---
Silicon	ppm	● 5	● 11	---	---
Sodium	ppm	● 2	● 3	---	---
Potassium	ppm	● 2	● 4	---	---



WEAR METALS

Iron	ppm	● 458	● 396	---	---
Copper	ppm	● 661	● 175	---	---
Lead	ppm	● 17	● 6	---	---
Tin	ppm	● 8	● 5	---	---
Aluminum	ppm	● <1	● <1	---	---
Chromium	ppm	● 6	● 5	---	---
Molybdenum	ppm	● 6	● <1	---	---
Nickel	ppm	● <1	● 1	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	0	<1	---	---
Manganese	ppm	● 4	4	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

Calcium	ppm	● 107	● 19	---	---
Magnesium	ppm	● 47	● 7	---	---
Zinc	ppm	● 113	● 21	---	---
Phosphorus	ppm	● 595	● 581	---	---
Barium	ppm	● 0	● 0	---	---
Boron	ppm	● 15	● 17	---	---

Diagnosis

We advise that you check for the source of water entry. 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. Copper and lead ppm levels are severe. Bearing and/or bushing wear is indicated. Free water present. Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: DOMBUR
Unique No: 5501462
Signed: Kevin Marson
Report Date: 13 Dec 2022



GRAPHS

