

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [DNA] LIEBHERR R934CT-Rex (S/N 20279) - Swing Drive

Sample No: LH0178238

Oil Type: KENDALL NS-MP HYPOID GEAR 80W90



#### SAMPLE INFORMATION

Sample Number	LH0178238	LH0224515	---	---
Sample Date	14 Nov 2023	15 Sep 2022	---	---
Machine Hours	10334	9870	---	---
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	62.1	52.8	---	---
-------------	-----	------	------	-----	-----



#### CONTAMINATION

Water	%	0.083	NEG	---	---
Silicon	ppm	5	2	---	---
Sodium	ppm	2	<1	---	---
Potassium	ppm	2	0	---	---



#### WEAR METALS

Iron	ppm	200	142	---	---
Copper	ppm	200	217	---	---
Lead	ppm	6	5	---	---
Tin	ppm	1	<1	---	---
Aluminum	ppm	0	0	---	---
Chromium	ppm	23	15	---	---
Molybdenum	ppm	0	<1	---	---
Nickel	ppm	<1	<1	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	<1	0	---	---
Manganese	ppm	2	1	---	---
Vanadium	ppm	0	0	---	---



#### ADDITIVES

Calcium	ppm	75	60	---	---
Magnesium	ppm	3	2	---	---
Zinc	ppm	368	306	---	---
Phosphorus	ppm	490	494	---	---
Barium	ppm	0	0	---	---
Boron	ppm	6	6	---	---

#### 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. Chromium ppm levels are severe. Lead ppm levels are abnormal. Bearing wear is indicated. Free water present. Viscosity of sample indicates oil is within ISO 68 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: DOMBUR  
Unique No: 5682263  
Signed: Kevin Marson  
Report Date: 20 Nov 2023



### GRAPHS

