

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR R936 040309-1148 - Left Final Drive

Sample No: LH0214961

Oil Type: PETRO CANADA TRAXON 75W90 SYNTHETIC



#### SAMPLE INFORMATION

Sample Number	LH0214961	LH0119400	LH0110772	LH0092955
Sample Date	17 Nov 2021	07 May 2018	22 Aug 2017	25 Feb 2016
Machine Hours	8375	4983	3907	1139
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	N/A	Changed
Sample Status	ABNORMAL	NORMAL	NORMAL	NORMAL

**RICHMOND STEEL RECYCLING**  
 11760 MITCHELL ROAD  
 RICHMOND, BC  
 CA V6V 1V8  
 Contact: Aaron Kaetler  
 AKaetler@richmondsteel.ca  
 T:  
 F: (604)324-8617



#### OIL CONDITION

Visc @ 40°C	cSt	106	113	114	120
-------------	-----	-----	-----	-----	-----



#### CONTAMINATION

Silicon	ppm	115	45	24	6
Sodium	ppm	16	12	12	11
Potassium	ppm	1113	1351	1407	921



#### WEAR METALS

Iron	ppm	282	139	78	41
Copper	ppm	1	2	2	1
Lead	ppm	1	<1	<1	<1
Tin	ppm	0	0	0	0
Aluminum	ppm	31	13	7	1
Chromium	ppm	4	2	<1	<1
Molybdenum	ppm	<1	0	0	<1
Nickel	ppm	3	2	<1	<1
Titanium	ppm	2	1	<1	0
Silver	ppm	0	0	0	0
Manganese	ppm	3	1	<1	<1
Vanadium	ppm	<1	<1	0	0



#### ADDITIVES

Calcium	ppm	107	123	158	231
Magnesium	ppm	8	4	4	15
Zinc	ppm	131	103	106	116
Phosphorus	ppm	445	463	512	887
Barium	ppm	1	<1	<1	2
Boron	ppm	952	1230	1323	825

#### 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. Aluminum ppm levels are noted. All other component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable due to the presence of contaminants.

Depot: RIC117RIC  
 Unique No: 5317028  
 Signed: Bill Quesnel  
 Report Date: 19 Nov 2021



### GRAPHS

