

LIEBHERR

CONSTRUCTION EQUIPMENT



[(339786)] LIEBHERR R920 047100-1705 - Diesel Engine

Sample No: LH0288055

Oil Type: PETRO CANADA 10W40



Sample Information

Sample Number	LH0288055	LH0242087	LH0260637	LH0240689
Sample Date	18 Apr 2024	07 Nov 2023	28 Apr 2023	04 Oct 2022
Machine Hours	3616	3040	2450	1988
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

ECOWASTE INDUSTRIES LTD.
 15111 WILLIAMS ROAD
 RICHMOND, BC
 CA V6W 1G9
 Contact: Service Manager



Oil Condition

Visc @ 100°C	cSt	13.9	14.0	14.1	15.1
Oxidation (PA)	%	71	66	76	101

T: (604)277-1410
 F:



Contamination

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0	0	0
Nitration (PA)	%	77	70	80	90
Sulfation (PA)	%	58	56	61	72
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	18	10	22	17
Sodium	ppm	2	3	3	4
Potassium	ppm	<1	0	1	<1

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.



Wear Metals

Iron	ppm	12	12	10	16
Copper	ppm	2	3	6	19
Lead	ppm	0	<1	<1	3
Tin	ppm	0	0	<1	<1
Aluminum	ppm	1	2	2	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	50	55	52	62
Nickel	ppm	<1	0	<1	0
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	<1	0	<1
Manganese	ppm	0	0	<1	<1
Vanadium	ppm	0	0	0	0



Additives

Calcium	ppm	1208	1167	1364	1151
Magnesium	ppm	990	1008	943	1054
Zinc	ppm	1173	1240	1253	1300
Phosphorus	ppm	978	998	1117	1164
Barium	ppm	0	0	0	0
Boron	ppm	18	11	26	8

Depot: ECORIC
 Unique No: 5763633
 Signed: Wes Davis
 Report Date: 22 Apr 2024



Graphs

