

[[575873]] LIEBHERR HS8100 184908 - DIESEL ENGINE

Sample No: LH0277710

Oil Type: PETRO CANADA 10W30

SAMPLE INFORMATION

Sample Number	LH0277710	LH0251528	LH0227489	LH0230703
Sample Date	12 Oct 2023	23 Jan 2023	13 Oct 2022	22 Jul 2022
Machine Hours	12289	10946	10517	10063
Oil Hours	0	0	0	0
Oil Changed	N/A	Changed	N/A	N/A
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

Tillsonburg Ready-Mix Inc.
 10 Elm Street
 Tillsonburg, ON
 CA N4G 0A7
 Contact: Service Manager

T:
F:

OIL CONDITION

Visc @ 100°C	cSt	11.8	11.9	12.0	11.8
Oxidation (PA)	%	103	88	85	90

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.

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0	0	0
Nitration (PA)	%	91	85	86	88
Sulfation (PA)	%	66	62	60	62
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	1.2	1.1
Silicon	ppm	5	6	5	6
Sodium	ppm	11	4	5	5
Potassium	ppm	<1	0	0	0

WEAR METALS

Iron	ppm	5	3	3	4
Copper	ppm	1	1	1	2
Lead	ppm	1	0	<1	<1
Tin	ppm	0	0	<1	<1
Aluminum	ppm	1	2	1	1
Chromium	ppm	<1	0	0	0
Molybdenum	ppm	65	60	62	57
Nickel	ppm	0	<1	0	0
Titanium	ppm	0	<1	<1	<1
Silver	ppm	<1	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0

ADDITIVES

Calcium	ppm	853	854	840	856
Magnesium	ppm	1166	1142	1137	1157
Zinc	ppm	1241	1219	1190	1254
Phosphorus	ppm	991	1096	1049	1027
Barium	ppm	<1	0	0	0
Boron	ppm	16	30	24	18

Depot: TIL10TIL
Unique No: 5658553
Signed: Kevin Marson
Report Date: 17 Oct 2023

GRAPHS

