

LIEBHERR

CONSTRUCTION EQUIPMENT



[(360377)] LIEBHERR L580 059426-1464 - Diesel Engine

Sample No: LH0237657

Oil Type: PETRO CANADA 10W40



Sample Information

Sample Number	LH0237657	LH0187106	LH0237638	LH0237635
Sample Date	03 May 2024	19 Jan 2024	08 Sep 2023	19 Jul 2023
Machine Hours	6520	5883	5106	4747
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	NORMAL	NORMAL	NORMAL

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Oil Condition

Visc @ 100°C	cSt	11.3	13.6	14.1	13.1
Oxidation (PA)	%	57	58	55	57



Contamination

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0	0	0
Nitration (PA)	%	53	53	48	57
Sulfation (PA)	%	51	51	50	53
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	0.6	<1.0	<1.0	<1.0
Silicon	ppm	3	4	4	5
Sodium	ppm	2	<1	1	2
Potassium	ppm	<1	<1	<1	<1

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.



Wear Metals

Iron	ppm	4	4	2	4
Copper	ppm	<1	<1	<1	2
Lead	ppm	0	<1	<1	<1
Tin	ppm	0	0	0	<1
Aluminum	ppm	<1	1	<1	<1
Chromium	ppm	0	0	0	<1
Molybdenum	ppm	59	54	57	56
Nickel	ppm	0	<1	0	0
Titanium	ppm	<1	2	0	0
Silver	ppm	0	0	<1	<1
Manganese	ppm	0	0	0	<1
Vanadium	ppm	0	0	0	0



Additives

Calcium	ppm	1038	1057	1026	1004
Magnesium	ppm	982	917	957	981
Zinc	ppm	1171	1139	1165	1169
Phosphorus	ppm	1008	1000	974	1036
Barium	ppm	0	0	<1	0
Boron	ppm	2	5	1	5

Depot: CLOPEM
 Unique No: 5776742
 Signed: Kevin Marson
 Report Date: 16 May 2024



Graphs

