

LIEBHERR

CONSTRUCTION EQUIPMENT



[(347076)] LIEBHERR L586 062518-1761 - Diesel Engine

Sample No: LH0269616

Oil Type: PETRO CANADA 10W30



SAMPLE INFORMATION

Sample Number	LH0269616	LH0269534	LH0234513	LH0238538
Sample Date	24 Jan 2024	28 Aug 2023	17 Jan 2023	20 Aug 2022
Machine Hours	8083	7038	5327	4090
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	N/A	Changed
Sample Status	ABNORMAL	NORMAL	NORMAL	NORMAL

MODERN CONSTRUCTION (1983) LTD.
 364 BRIGGS CROSS ROAD
 STILESVILLE, NB
 CA E1G 3G3
 Contact: Blaine Cail
 blaine.cail@moderngroup.ca
 T:
 F:



OIL CONDITION

Visc @ 40°C	cSt	---	---	70.1	---
Visc @ 100°C	cSt	11.8	12.6	11.4	11.4
Viscosity Index (VI)	Scale	---	---	156	---
Oxidation (PA)	%	101	71	93	93

Diagnosis

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate concentration of water present in the oil. Free water present. Test for glycol is negative. The white residue present in the sample is oil additive precipitate. The oil is no longer serviceable due to the presence of contaminants.



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0	0	0
Nitration (PA)	%	97	76	85	89
Sulfation (PA)	%	68	60	65	65
Glycol	%	0.0	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	8	10	7	8
Sodium	ppm	4	2	5	5
Potassium	ppm	9	12	7	3



WEAR METALS

Iron	ppm	9	6	9	9
Copper	ppm	2	3	4	4
Lead	ppm	2	1	<1	2
Tin	ppm	0	<1	<1	<1
Aluminum	ppm	6	5	4	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	60	63	62	59
Nickel	ppm	<1	0	<1	0
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	890	1068	863	861
Magnesium	ppm	1135	1045	1115	1151
Zinc	ppm	1255	1242	1190	1264
Phosphorus	ppm	1031	1081	1051	1045
Barium	ppm	0	0	0	0
Boron	ppm	24	2	16	15

Depot: MODSTI
Unique No: 5720822
Signed: Bill Quesnel
Report Date: 31 Jan 2024



GRAPHS

