

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH30M 138696-1253 - Diesel Engine

Sample No: LH0274185

Oil Type: PETRO CANADA 10W40



METAUX 139 INC.
86 RTE MARIE-VICTORIN
PIERREVILLE, QC
CA J0G 1J0
Contact: Service Manager



SAMPLE INFORMATION

Sample Number	LH0274185	LH0256081	LH0250761	LH0235172
Sample Date	26 Sep 2023	14 Jun 2023	15 Feb 2023	19 Oct 2022
Machine Hours	2491	1925	1202	544
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	ABNORMAL	NORMAL	ABNORMAL



OIL CONDITION

Visc @ 100°C	cSt	11.3	10.9	12.6	11.5
Oxidation (PA)	%	76	80	72	206



CONTAMINATION

Soot %	%	0	0	0	0
Nitration (PA)	%	78	79	64	101
Sulfation (PA)	%	55	58	60	112
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	1.2	1.3	<1.0	0.9
Silicon	ppm	6	6	6	10
Sodium	ppm	4	4	2	3
Potassium	ppm	0	<1	<1	3



WEAR METALS

Iron	ppm	4	5	4	10
Copper	ppm	5	31	103	289
Lead	ppm	<1	<1	3	10
Tin	ppm	0	<1	<1	1
Aluminum	ppm	<1	2	1	2
Chromium	ppm	<1	<1	<1	1
Molybdenum	ppm	60	62	57	45
Nickel	ppm	0	0	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	837	903	1112	1386
Magnesium	ppm	1143	1115	956	923
Zinc	ppm	1241	1252	1168	850
Phosphorus	ppm	1067	1088	1068	759
Barium	ppm	<1	1	3	36
Boron	ppm	26	31	4	85

T:
F:

Diagnosis

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. All component wear rates are normal. Light fuel dilution occurring. No other contaminants were detected 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.

Depot: MET126WIC
Unique No: 5655148
Signed: Kevin Marson
Report Date: 03 Oct 2023



GRAPHS

