

LIEBHERR

CONSTRUCTION EQUIPMENT



[(355228)] LIEBHERR LH60M T14198-1217 - Diesel Engine

Sample No: LH0281015

Oil Type: PETRO CANADA SUPREME SYNTHETIC 5W40



SAMPLE INFORMATION

Sample Number	LH0281015	LH0225135	LH0269774	LH0225068
Sample Date	08 Feb 2024	07 Dec 2023	22 Sep 2023	10 Feb 2023
Machine Hours	8700	8004	7355	4980
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	ABNORMAL	NORMAL	NORMAL

AltaSteel

9401 34 St NW
Edmonton, AB
CA T6B 2X6
Contact: Richard Bailey
richard.bailey@altasteel.com
T:
F:



OIL CONDITION

Visc @ 100°C	cSt	12.3	11.7	13.2	11.7
Oxidation (PA)	%	110	92	70	82



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0	0	0
Nitration (PA)	%	108	90	72	88
Sulfation (PA)	%	68	63	54	61
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	2	1.9	<1.0	<1.0
Silicon	ppm	6	6	6	10
Sodium	ppm	5	4	2	5
Potassium	ppm	<1	<1	0	<1

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.



WEAR METALS

Iron	ppm	8	4	3	4
Copper	ppm	2	<1	<1	<1
Lead	ppm	0	<1	<1	0
Tin	ppm	0	0	0	0
Aluminum	ppm	<1	2	<1	1
Chromium	ppm	0	0	0	0
Molybdenum	ppm	64	61	58	62
Nickel	ppm	0	<1	0	0
Titanium	ppm	0	0	0	<1
Silver	ppm	0	0	<1	<1
Manganese	ppm	0	0	0	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	877	845	1011	874
Magnesium	ppm	1185	1094	977	1151
Zinc	ppm	1278	1200	1177	1268
Phosphorus	ppm	1033	989	984	1153
Barium	ppm	0	0	<1	0
Boron	ppm	21	19	2	30

Depot: ALT940EDM
Unique No: 5748360
Signed: Kevin Marson
Report Date: 21 Mar 2024



GRAPHS

