

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [(361220)] LIEBHERR LH50M 134706-1216 - Diesel Engine

Sample No: LH

Oil Type: PETRO CANADA SUPREME 5W30



#### SAMPLE INFORMATION

Sample Number	LH	LH	LH0234443	LH0250105
Sample Date	15 Feb 2024	17 Sep 2023	15 Jun 2023	27 Mar 2023
Machine Hours	5100	0	3528	2610
Oil Hours	0	0	0	0
Oil Changed	Changed	N/A	Not Changd	N/A
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

#### Industrial Metals

550 Messier St.  
Winnipeg, MB  
CA R2J 0G5  
Contact: Service Manager



#### OIL CONDITION

Visc @ 100°C	cSt	13.3	12.8	13.6	13.5
Oxidation (PA)	%	96	91	66	65

T:  
F:



#### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0	0	0
Nitration (PA)	%	89	84	69	67
Sulfation (PA)	%	64	63	52	60
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	6	6	6
Sodium	ppm	2	2	1	2
Potassium	ppm	<1	<1	<1	0

#### 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. Viscosity of sample indicates oil is within SAE 40 range, advise investigate. The condition of the oil is acceptable for the time in service.



#### WEAR METALS

Iron	ppm	7	6	3	3
Copper	ppm	3	4	2	5
Lead	ppm	<1	<1	<1	<1
Tin	ppm	<1	<1	0	0
Aluminum	ppm	2	1	<1	1
Chromium	ppm	<1	<1	<1	0
Molybdenum	ppm	60	59	59	59
Nickel	ppm	<1	<1	0	<1
Titanium	ppm	0	0	0	<1
Silver	ppm	0	0	<1	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



#### ADDITIVES

Calcium	ppm	1099	1041	1012	1133
Magnesium	ppm	979	993	984	989
Zinc	ppm	1207	1210	1197	1231
Phosphorus	ppm	1011	1049	1070	1105
Barium	ppm	0	<1	0	<1
Boron	ppm	<1	1	2	8

Depot: IND550WIN  
Unique No: 5733644  
Signed: Kevin Marson  
Report Date: 20 Feb 2024



### GRAPHS

