

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH50M 110456-1216 - Diesel Engine

Sample No: LH0277117

Oil Type: PETRO CANADA DURON UHP 5W30



**J.D. Irving**  
 Truro Sawmill, 529 Valley Dale Road  
 Truro, NS  
 CA B2N 5C5  
 Contact: Sheldon Richardson  
 richardson.sheldon@jdirving.com  
 T: (902)890-9419  
 F:



#### SAMPLE INFORMATION

Sample Number	LH0277117	LH0234611	LH0250239	LH0246689
Sample Date	13 Oct 2023	01 Apr 2023	12 Jan 2023	15 Dec 2022
Machine Hours	17581	16012	15658	0
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	N/A
Sample Status	NORMAL	NORMAL	NORMAL	ABNORMAL



#### OIL CONDITION

Visc @ 40°C	cSt	---	---	---	69.8
Visc @ 100°C	cSt	11.4	11.6	11.6	10.1
Viscosity Index (VI)	Scale	---	---	---	128
Oxidation (PA)	%	97	75	77	55



#### CONTAMINATION

Soot %	%	0	0	0	0
Nitration (PA)	%	93	78	81	40
Sulfation (PA)	%	65	55	59	53
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	7	7	4
Sodium	ppm	5	4	4	2
Potassium	ppm	0	<1	0	0



#### WEAR METALS

Iron	ppm	9	2	3	24
Copper	ppm	2	<1	<1	4
Lead	ppm	1	0	<1	0
Tin	ppm	0	<1	<1	<1
Aluminum	ppm	2	1	2	1
Chromium	ppm	<1	0	0	0
Molybdenum	ppm	60	57	60	61
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	<1	<1
Silver	ppm	<1	0	0	0
Manganese	ppm	0	<1	<1	1
Vanadium	ppm	0	0	0	0



#### ADDITIVES

Calcium	ppm	831	837	856	1157
Magnesium	ppm	1145	1100	1128	1009
Zinc	ppm	1234	1197	1244	1247
Phosphorus	ppm	1000	1082	1098	1199
Barium	ppm	<1	0	0	0
Boron	ppm	16	38	35	9

#### 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. The condition of the oil is acceptable for the time in service.

Depot: JDITRU  
 Unique No: 5668001  
 Signed: Kevin Marson  
 Report Date: 23 Oct 2023

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### GRAPHS

