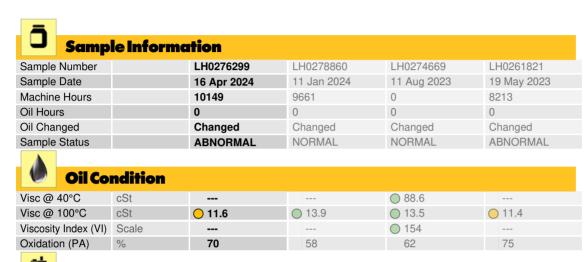
# LIEBHERR

## **CONSTRUCTION EQUIPMENT**

## **LIEBHERR L586 053090-1334 - Diesel Engine**

Sample No: LH0276299

Oil Type: PETRO CANADA SUPREME 10W40 MOTOR OIL



Conta	mination				
Water	%	NEG	NEG	NEG	NEG
Soot %	%	<b>0</b>	<b>0</b>	O 0	O 0
Nitration (PA)	%	70	51	58	75
Sulfation (PA)	%	54	51	55	55
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<b>2.8</b>	<1.0	<1.0	<b>2.8</b>
Silicon	ppm	<b>6</b>	<b>5</b>	<b>8</b>	<b>6</b>
Sodium	ppm	<b>4</b>	O 1	O 2	<b>4</b>
Potassium	ppm	<b>()</b> <1	O <1	<1	O <1

Wea	r Metals				
Iron	ppm	<b>3</b>	O 2	<b>7</b>	O 5
Copper	ppm	<b></b> <1	O <1	<1	<b>1</b>
Lead	ppm	<b>0</b>	O <1	<1	0
Tin	ppm	<b>0</b>	O 0	0	0
Aluminum	ppm	<b>2</b>	O 2	O 1	O 2
Chromium	ppm	<b>0</b>	O 0	<1	<b>O</b> <1
Molybdenum	ppm	<b>56</b>	<b>o</b> 56	<b>58</b>	O 62
Nickel	ppm	<b>0</b>	O <1	O 0	<b>O</b> <1
Titanium	ppm	0	0	<1	<1
Silver	ppm	<b>0</b>	O 0	O 0	0
Manganese	ppm	<b>0</b>	O 0	<1	<1
Vanadium	ppm	0	0	0	0

Add	litives					
Calcium	ppm	○ 859	O 1032	O 1019	O 888	
Magnesium	ppm	<u> </u>	934	991	<b>1099</b>	
Zinc	ppm	<u> </u>	1134	1173	1187	
Phosphorus	ppm	<b>0</b> 1003	991	1055	<b>1077</b>	
Barium	ppm	<b>0</b>	O 0	O	0	
Boron	ppm	<b>34</b>	O <1	<b>4</b>	<b>3</b> 1	



#### Waterford Sand and Gravel Ltd.

70 Ewart Avenue Brantford, ON CA N3T 5M1 Contact: Ed Lamb elamb@waterfordgroup.ca T: (905)981-6702 F:

### Diagnosis

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Light fuel dilution occurring. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is acceptable for the time in service.

Depot:WAT70BRA2Unique No:5762637Signed:Wes DavisReport Date:18 Apr 2024

CONSTRUCTION EQUIPMENT





## **Graphs**

