

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR L586 053090-1334 - Diesel Engine

Sample No: LH0276299

Oil Type: PETRO CANADA SUPREME 10W40 MOTOR OIL



#### Sample Information

Sample Number	LH0276299	LH0278860	LH0274669	LH0261821
Sample Date	16 Apr 2024	11 Jan 2024	11 Aug 2023	19 May 2023
Machine Hours	10149	9661	0	8213
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	NORMAL	NORMAL	ABNORMAL

**Waterford Sand and Gravel Ltd.**

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#### Oil Condition

Visc @ 40°C	cSt	---	---	88.6	---
Visc @ 100°C	cSt	11.6	13.9	13.5	11.4
Viscosity Index (VI)	Scale	---	---	154	---
Oxidation (PA)	%	70	58	62	75

#### 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.



#### Contamination

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



#### Wear Metals

Iron	ppm	3	2	7	5
Copper	ppm	<1	<1	<1	1
Lead	ppm	0	<1	<1	0
Tin	ppm	0	0	0	0
Aluminum	ppm	2	2	1	2
Chromium	ppm	0	0	<1	<1
Molybdenum	ppm	56	56	58	62
Nickel	ppm	0	<1	0	<1
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	0	0	<1	<1
Vanadium	ppm	0	0	0	0



#### Additives

Calcium	ppm	859	1032	1019	888
Magnesium	ppm	1109	934	991	1099
Zinc	ppm	1185	1134	1173	1187
Phosphorus	ppm	1003	991	1055	1077
Barium	ppm	0	0	0	0
Boron	ppm	34	<1	4	31

Depot: WAT70BRA2  
Unique No: 5762637  
Signed: Wes Davis  
Report Date: 18 Apr 2024



### Graphs

