

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR R938 050294-1650 - Diesel Engine

Sample No: LH0172344

Oil Type: PETRO CANADA 15W40



#### INFORMATION SUR L'ÉCHANTILLON

Numéro d'échant.	LH0172344	LH0257075	LH0234695	LH0203141
Date d'échant.	11 Jul 2023	21 Mar 2023	10 Sep 2022	02 Jun 2022
Heures de la Machine	4478	4098	3452	3077
Heures de l'huile	0	0	0	0
Huile changée	Changed	Changed	Changed	Changed
Statut de l'échant.	NORMAL	NORMAL	ABNORMAL	ABNORMAL

**MOOREFIELD EXCAVATING LTD.**  
 6297 WELLINGTON RD. 109S, RR #3  
 HARRISTON, ON  
 CA N0G 1Z0  
 Contact: John Landman  
 info@moorefieldex.ca  
 T: (519)343-3571  
 F: (519)510-3277



#### ÉTAT D'HUILE

Visc 100°C	cSt	13.5	12.9	12.3	11.5
Oxydation (PA)	%	63	92	198	42



#### CONTAMINATION

% de suie	%	0	0	0	0
Nitration (PA)	%	63	85	93	41
Sulfatation (PA)	%	54	70	110	37
Glycol	%	NEG	NEG	NEG	NEG
Essence	%	<1.0	<1.0	1	1
Silicium	ppm	6	7	8	8
Sodium	ppm	2	2	3	4
Potassium	ppm	<1	<1	3	<1

#### Diagnostic

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.



#### MÉTAUX D'USURE

Fer	ppm	5	9	9	5
Cuivre	ppm	31	87	94	8
Plomb	ppm	1	4	5	1
Étain	ppm	<1	1	1	1
Aluminium	ppm	1	2	2	1
Chrome	ppm	<1	<1	<1	2
Molybdène	ppm	56	58	42	61
Nickel	ppm	0	<1	0	0
Titane	ppm	0	<1	<1	<1
Argent	ppm	<1	0	0	0
Manganèse	ppm	<1	<1	1	0
Vanadium	ppm	0	0	0	0



#### ADDITIFS

Calcium	ppm	1059	1204	1492	987
Magnésium	ppm	974	973	860	1015
Zinc	ppm	1165	1157	904	1224
Phosphore	ppm	1017	973	853	1089
Baryum	ppm	<1	3	19	0
Bore	ppm	4	7	83	56

Depot: MOOPAL  
 Unique No: 5616422  
 Signed: Wes Davis  
 Report Date: 21 Jul 2023



### GRAPHS

