

LIEBHERR

CONSTRUCTION EQUIPMENT



[(355226)] LIEBHERR R938 053191-1650 - Diesel Engine

Sample No: LH0284898

Oil Type: PETRO CANADA 10W40



THOMAS CAVANAGH CONSTRUCTION LTD
RR # 2, 9094 CAVANAGH ROAD
ASHTON, ON
CA K0A 1B0
Contact: Keith

T: (613)257-4995
F: (613)253-0071



INFORMATION SUR L'ÉCHANTILLON

Numéro d'échant.	LH0284898	LH0274642	LH0279026	LH0195723
Date d'échant.	13 Feb 2024	01 Nov 2023	01 Nov 2023	26 Jul 2023
Heures de la Machine	3960	3610	3610	3133
Heures de l'huile	0	0	0	0
Huile changée	Changed	Changed	Changed	Changed
Statut de l'échant.	ABNORMAL	ABNORMAL	NORMAL	NORMAL



ÉTAT D'HUILE

Visc 100°C	cSt	11.9	11.7	13.2	12.8
Oxydation (PA)	%	76	68	71	75



CONTAMINATION

Eau	%	NEG	NEG	NEG	NEG
% de suie	%	0	0	0	0
Nitration (PA)	%	76	68	73	78
Sulfatation (PA)	%	55	53	55	58
Glycol	%	NEG	NEG	NEG	NEG
Essence	%	1.3	1.5	<1.0	<1.0
Silicium	ppm	9	7	7	8
Sodium	ppm	4	2	2	2
Potassium	ppm	3	0	0	1

Diagnostic

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. All component wear rates are normal. Light fuel dilution occurring. No other contaminants were detected in the oil. Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.



MÉTAUX D'USURE

Fer	ppm	4	3	4	5
Cuivre	ppm	1	2	3	3
Plomb	ppm	0	<1	<1	<1
Étain	ppm	0	0	0	<1
Aluminium	ppm	3	1	2	2
Chrome	ppm	<1	0	<1	<1
Molybdène	ppm	59	60	59	57
Nickel	ppm	0	0	0	0
Titane	ppm	0	0	0	1
Argent	ppm	0	<1	<1	0
Manganèse	ppm	0	0	0	<1
Vanadium	ppm	0	0	0	0



ADDITIFS

Calcium	ppm	858	1071	1066	1055
Magnésium	ppm	1091	981	973	999
Zinc	ppm	1197	1215	1204	1238
Phosphore	ppm	1030	1008	986	1089
Baryum	ppm	0	<1	<1	<1
Bore	ppm	35	2	1	5

Depot: CAVASH
Unique No: 5734690
Signed: Kevin Marson
Report Date: 26 Feb 2024



GRAPHS

