



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH60M 110921-1217
Component
Diesel Engine
Fluid
PETRO CANADA SUPREME 5W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0281348	LH0256301	LH0239026
Sample Date		Client Info		17 Jan 2024	14 Apr 2023	03 Nov 2022
Machine Age	hrs	Client Info		5548	8104	7291
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	26	5	7
Chromium	ppm	ASTM D5185(m)	>5	<1	0	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>15	5	3	7
Lead	ppm	ASTM D5185(m)	>30	<1	1	1
Copper	ppm	ASTM D5185(m)	>125	3	2	3
Tin	ppm	ASTM D5185(m)	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

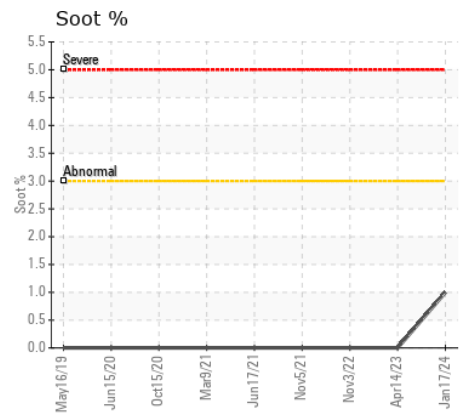
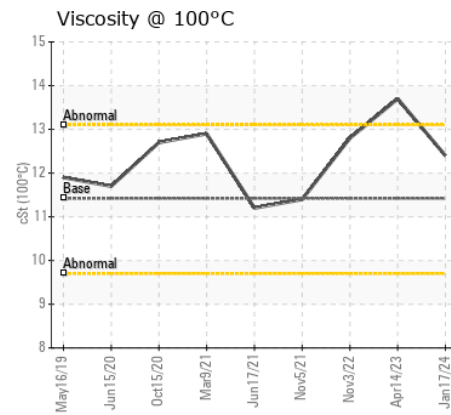
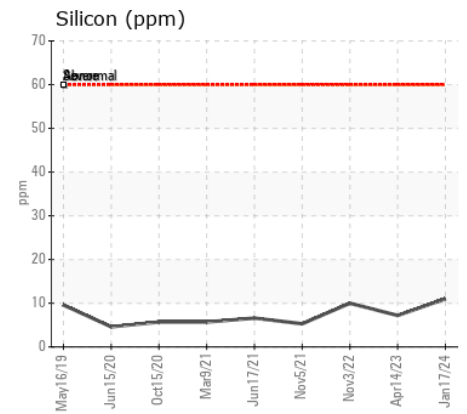
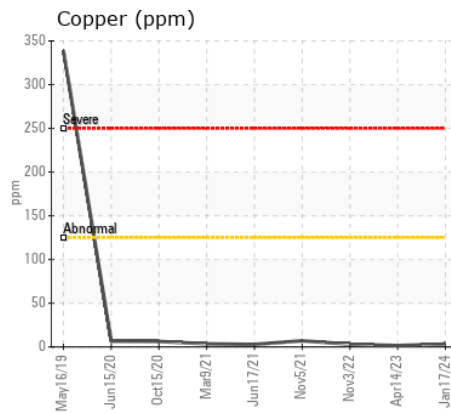
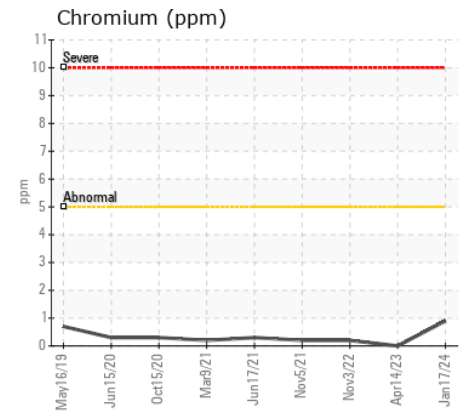
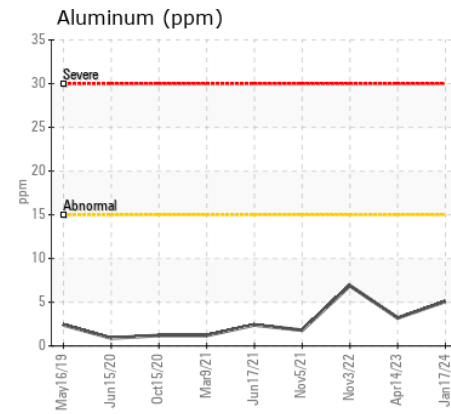
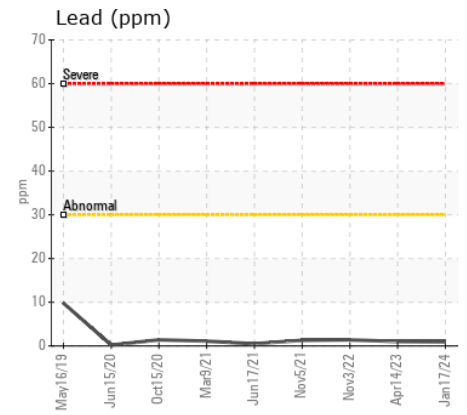
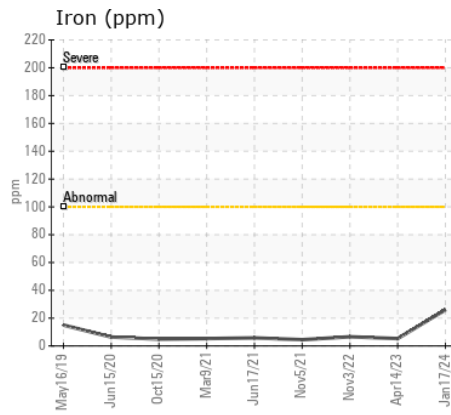
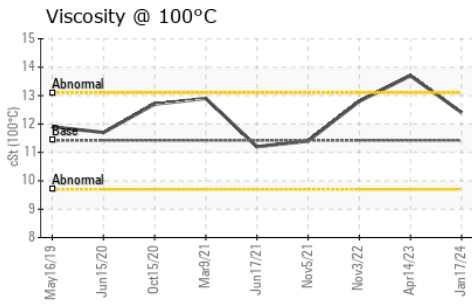
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	11	7	10
Potassium	ppm	ASTM D5185(m)	>20	1	3	11
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	1	0	0
Nitration	Abs/cm	ASTM D7624*	>20	12.2	10.9	11.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.7	20.5	23.1
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		5	2	3
Boron	ppm	ASTM D5185(m)	186	17	12	3
Barium	ppm	ASTM D5185(m)	<1	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	79	62	66	59
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	578	1094	821	993
Calcium	ppm	ASTM D5185(m)	1002	873	1390	1138
Phosphorus	ppm	ASTM D5185(m)	745	1030	1140	1092
Zinc	ppm	ASTM D5185(m)	837	1187	1254	1218
Sulfur	ppm	ASTM D5185(m)	2502	2882	2790	2552
Oxidation	Abs/.1mm	ASTM D7414*	>25	21.5	19.7	22.2
Visc @ 100°C	cSt	ASTM D7279(m)	11.42	12.4	13.7	12.8



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0281348 **Received** : 01 Mar 2024
Lab Number : 02619211 **Tested** : 01 Mar 2024
Unique Number : 5736321 **Diagnosed** : 01 Mar 2024 - Wes Davis
Test Package : MOB 1

American Iron and Metal
 997 CARPIN BEACH RD
 SAULT ST MARIE, ON
 CA P6A 6K4
 Contact: Service Manager

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

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