



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH40M 114405-1215
Component
Diesel Engine
Fluid
PETRO CANADA SUPREME 5W30 (30 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0270293	LH0281441	LH0270643
Sample Date		Client Info		25 Mar 2024	27 Nov 2023	12 Jul 2023
Machine Age	hrs	Client Info		6625	6537	6035
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	3	3	3
Chromium	ppm	ASTM D5185(m)	>5	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>15	<1	1	<1
Lead	ppm	ASTM D5185(m)	>30	0	<1	<1
Copper	ppm	ASTM D5185(m)	>125	1	3	1
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

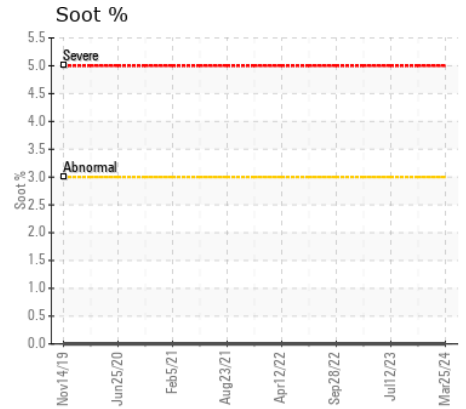
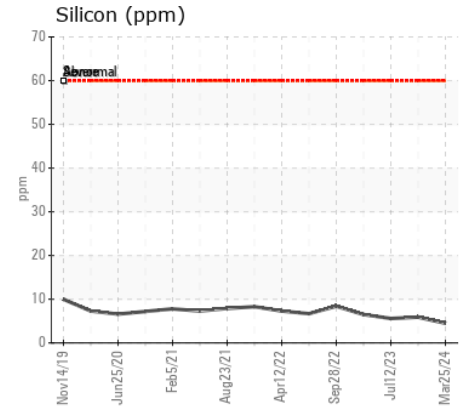
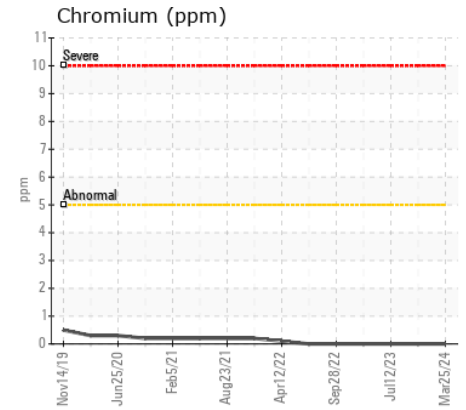
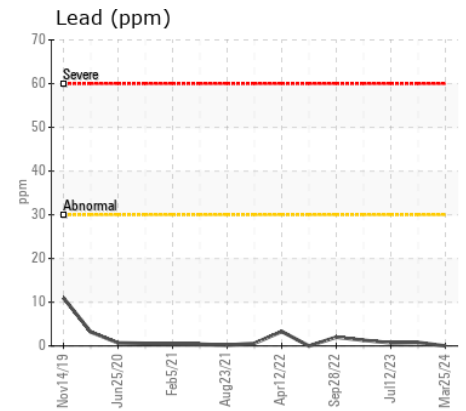
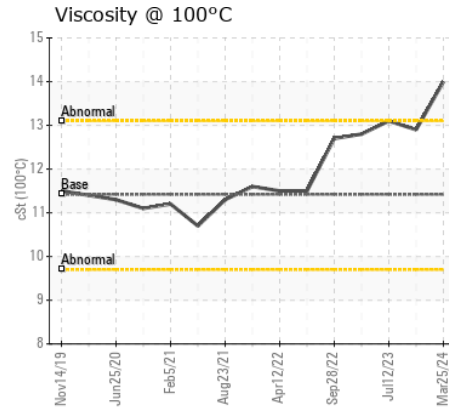
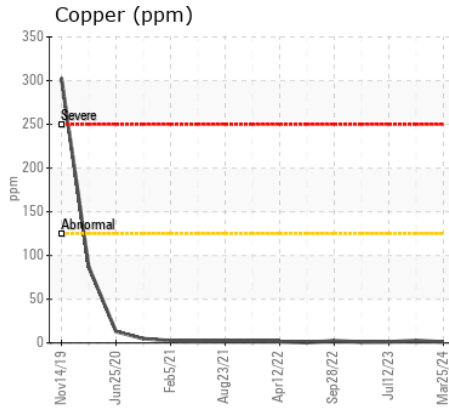
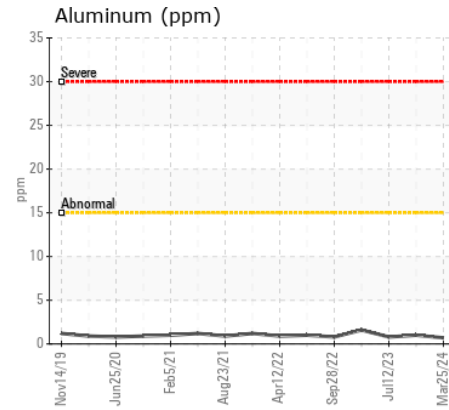
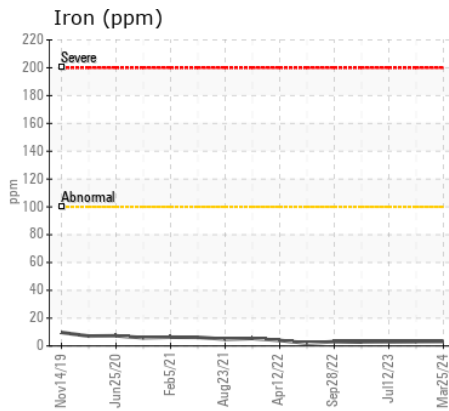
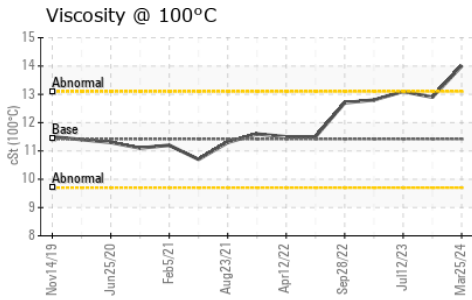
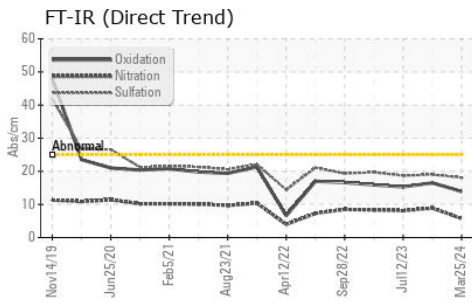
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	4	6	6
Potassium	ppm	ASTM D5185(m)	>20	0	0	0
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	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	5.7	8.9	8.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.1	19.0	18.7
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 40 range, advise investigate. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<1	2	2
Boron	ppm	ASTM D5185(m)	186	3	3	4
Barium	ppm	ASTM D5185(m)	<1	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	79	56	59	58
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	578	938	965	981
Calcium	ppm	ASTM D5185(m)	1002	1093	1046	1074
Phosphorus	ppm	ASTM D5185(m)	745	978	1006	1058
Zinc	ppm	ASTM D5185(m)	837	1155	1185	1207
Sulfur	ppm	ASTM D5185(m)	2502	2616	2523	2628
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.9	16.5	15.3
Visc @ 100°C	cSt	ASTM D7279(m)	11.42	14.0	12.9	13.1



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0270293
Lab Number : 02627606
Unique Number : 5760738
Test Package : MOB 1
Received : 09 Apr 2024
Tested : 09 Apr 2024
Diagnosed : 09 Apr 2024 - Kevin Marson

ELG Canada
 4375 CORPORATE DRIVE
 BURLINGTON, ON
 CA L7L 5P7
 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.

T:
 F: (905)335-9687