



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR LH30M 146757
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		LH0270286	PC0282262	LH0144138
Sample Date		Client Info		18 Mar 2024	11 Dec 2023	16 Aug 2023
Machine Age	hrs	Client Info		1518	1275	507
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	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>66	3	4	9
Chromium	ppm	ASTM D5185(m)	>4	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>8	1	2	3
Lead	ppm	ASTM D5185(m)	>10	0	4	8
Copper	ppm	ASTM D5185(m)	>74	16	129	274
Tin	ppm	ASTM D5185(m)	>4	0	<1	1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

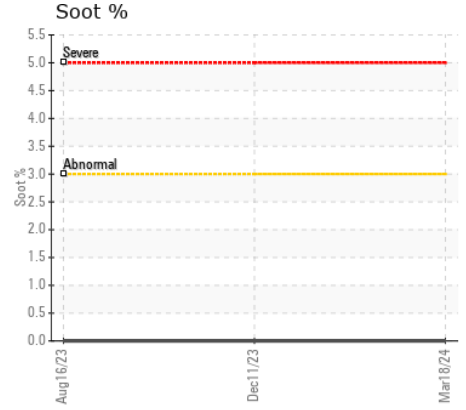
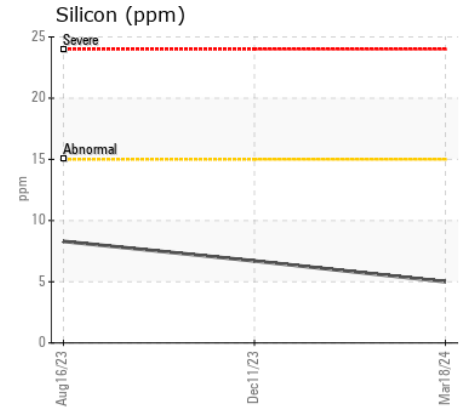
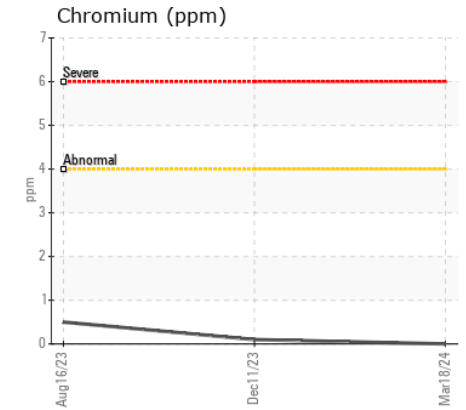
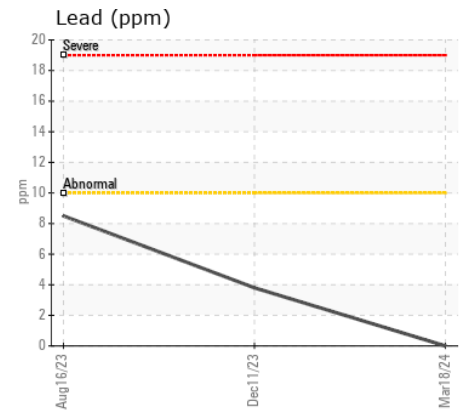
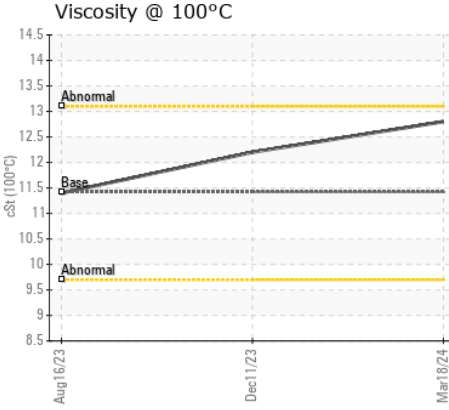
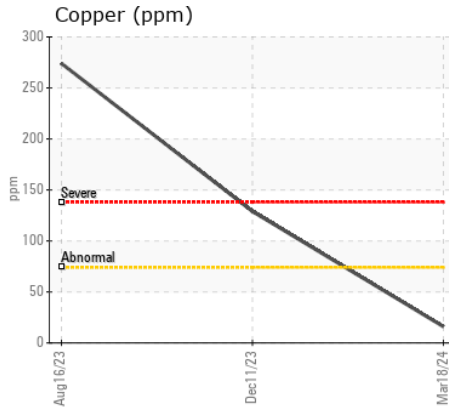
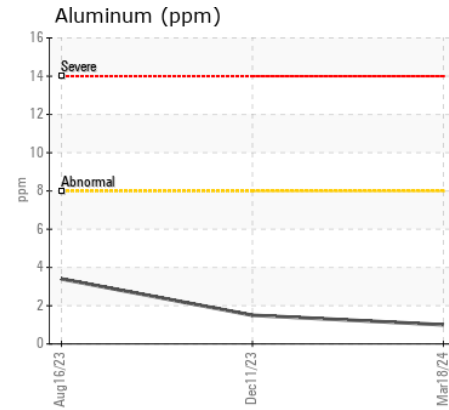
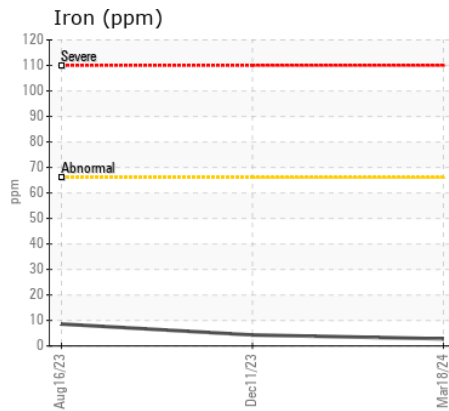
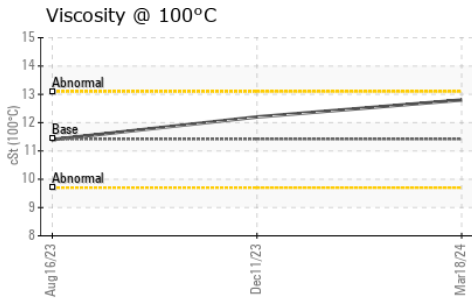
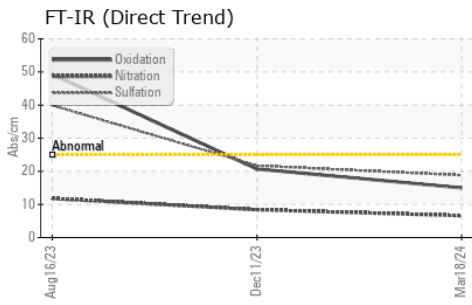
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	5	7	8
Potassium	ppm	ASTM D5185(m)	>20	0	1	2
Fuel		WC Method	>5	<1.0	1.2	1.1
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	6.6	8.4	11.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.8	21.7	39.9
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)		1	2	3
Boron	ppm	ASTM D5185(m)	186	1	7	76
Barium	ppm	ASTM D5185(m)	<1	<1	3	23
Molybdenum	ppm	ASTM D5185(m)	79	57	58	46
Manganese	ppm	ASTM D5185(m)	0	0	0	1
Magnesium	ppm	ASTM D5185(m)	578	976	981	961
Calcium	ppm	ASTM D5185(m)	1002	1058	1118	1318
Phosphorus	ppm	ASTM D5185(m)	745	988	934	773
Zinc	ppm	ASTM D5185(m)	837	1179	1136	874
Sulfur	ppm	ASTM D5185(m)	2502	2515	2303	1913
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.0	20.7	49.3
Visc @ 100°C	cSt	ASTM D7279(m)	11.42	12.8	▲ 12.2	11.4



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0270286 **Received** : 17 Apr 2024
Lab Number : 02629534 **Tested** : 17 Apr 2024
Unique Number : 5762666 **Diagnosed** : 17 Apr 2024 - Wes Davis
Test Package : MOB 1

Palmer
 3191 Albion Road
 Ottawa, ON
 CA K1V 8Y3
 Contact: Service

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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