



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR L586 068244
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		LH0288165	LH0278467	LH0224308
Sample Date		Client Info		25 Apr 2024	22 Mar 2024	21 Feb 2024
Machine Age	hrs	Client Info		9033	8517	8026
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	2	3	4
Chromium	ppm	ASTM D5185(m)	>5	0	0	<1
Nickel	ppm	ASTM D5185(m)	>5	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>15	<1	<1	1
Lead	ppm	ASTM D5185(m)	>30	0	0	0
Copper	ppm	ASTM D5185(m)	>125	1	2	3
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

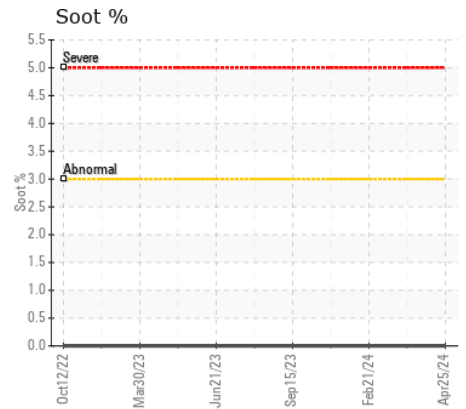
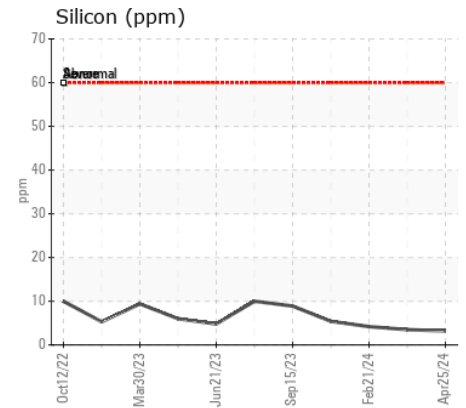
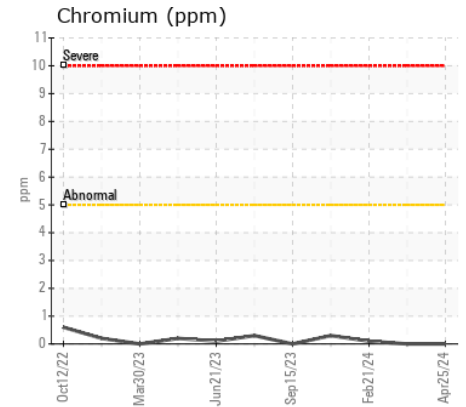
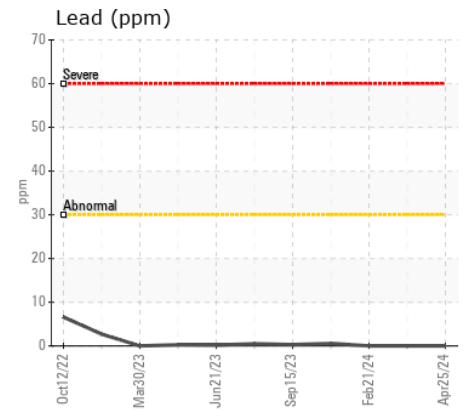
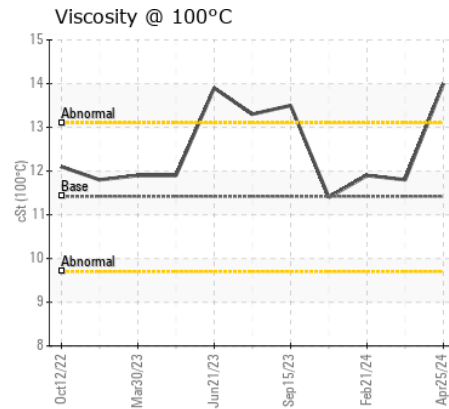
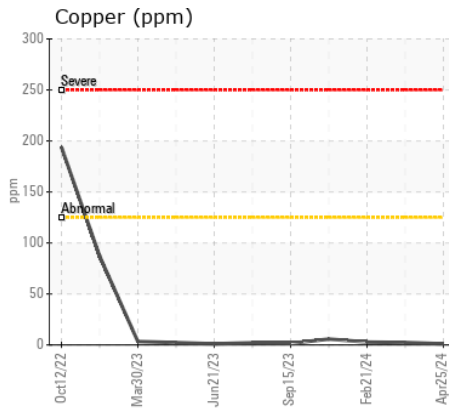
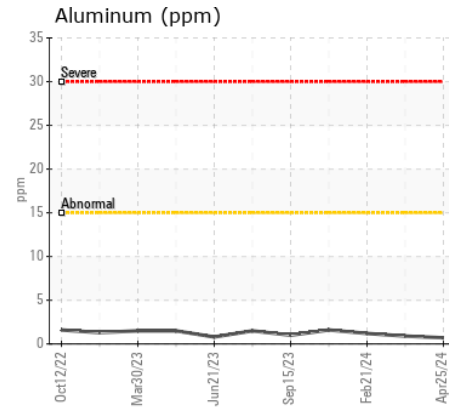
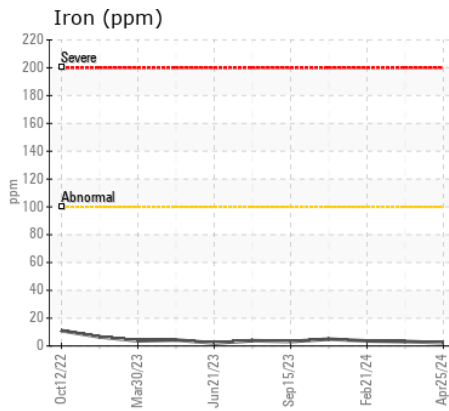
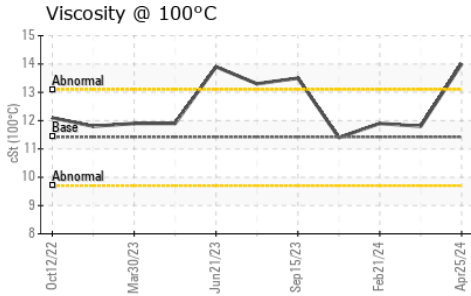
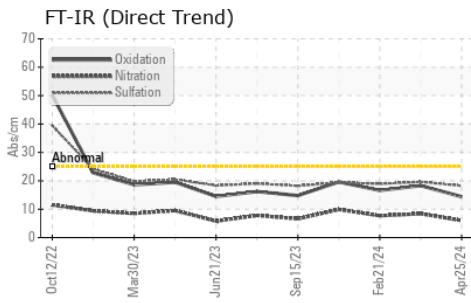
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	3	4	4
Potassium	ppm	ASTM D5185(m)	>20	0	<1	1
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	6.0	8.4	7.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.2	19.6	18.9
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	4	4
Boron	ppm	ASTM D5185(m)	186	5	43	27
Barium	ppm	ASTM D5185(m)	<1	0	0	0
Molybdenum	ppm	ASTM D5185(m)	79	58	60	57
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	578	982	1108	1050
Calcium	ppm	ASTM D5185(m)	1002	1003	816	870
Phosphorus	ppm	ASTM D5185(m)	745	998	1006	1005
Zinc	ppm	ASTM D5185(m)	837	1180	1216	1179
Sulfur	ppm	ASTM D5185(m)	2502	2534	2770	2829
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.4	18.3	16.6
Visc @ 100°C	cSt	ASTM D7279(m)	11.42	14.0	11.8	11.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0288165
Lab Number : 02633068
Unique Number : 5774221
Test Package : MOB 1

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 Selkirk, MB
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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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