



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR R945 055572-1866
Component
Diesel Engine
Fluid
PETRO CANADA 10W40 (30 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0281032	LH0250467	---
Sample Date		Client Info		21 Mar 2024	06 Apr 2023	---
Machine Age	hrs	Client Info		1586	562	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	5	14	---
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>5	0	<1	---
Titanium	ppm	ASTM D5185(m)		0	<1	---
Silver	ppm	ASTM D5185(m)	>3	0	0	---
Aluminum	ppm	ASTM D5185(m)	>15	1	2	---
Lead	ppm	ASTM D5185(m)	>30	<1	9	---
Copper	ppm	ASTM D5185(m)	>125	8	227	---
Tin	ppm	ASTM D5185(m)	>5	0	2	---
Vanadium	ppm	ASTM D5185(m)		0	0	---

CONTAMINATION

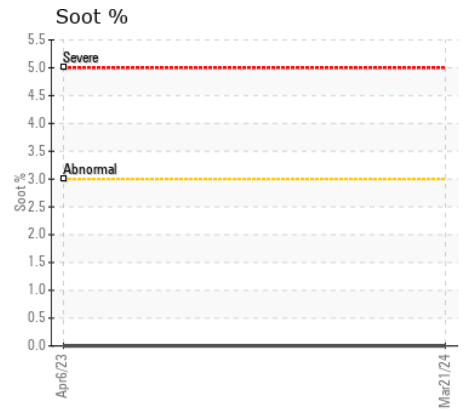
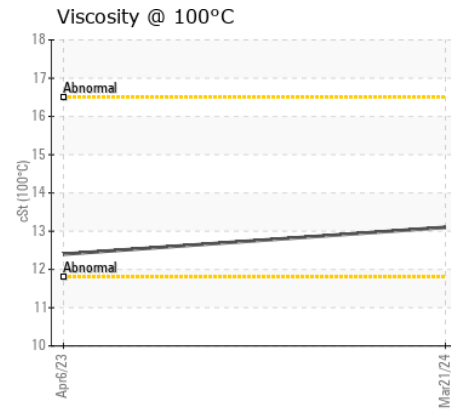
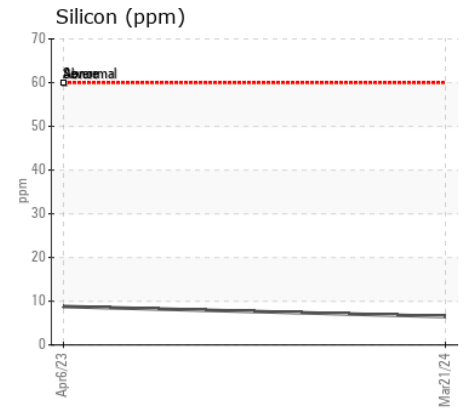
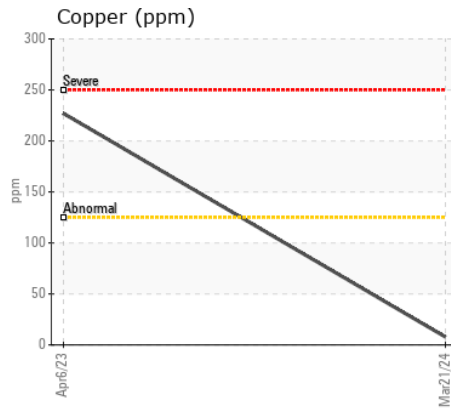
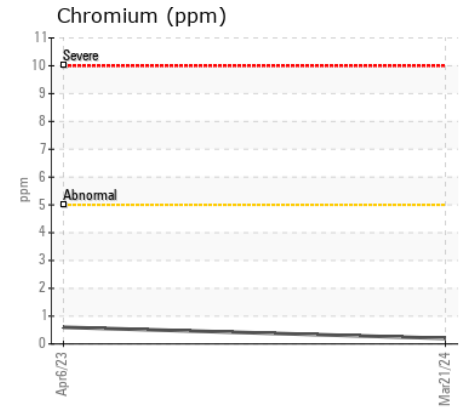
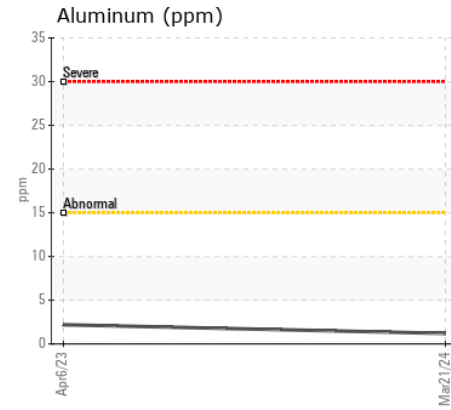
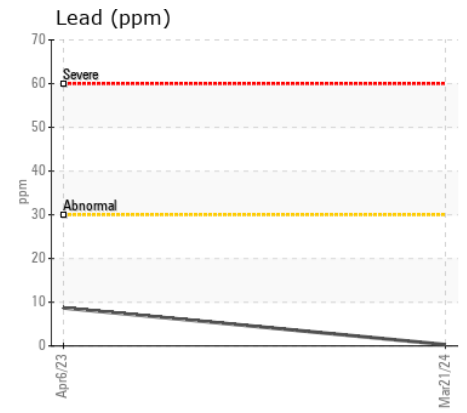
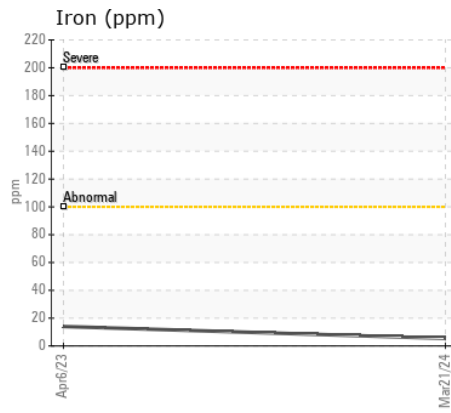
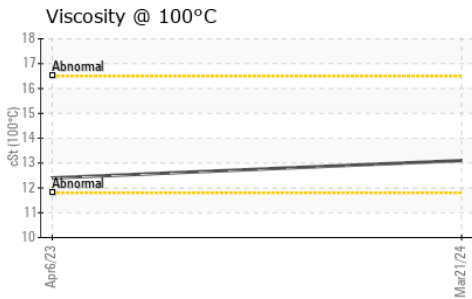
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	6	9	---
Potassium	ppm	ASTM D5185(m)	>20	<1	1	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>3	0	0	---
Nitration	Abs/cm	ASTM D7624*	>20	8.6	11.5	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.6	35.9	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)	>20	1	3	---
Boron	ppm	ASTM D5185(m)		1	47	---
Barium	ppm	ASTM D5185(m)		<1	21	---
Molybdenum	ppm	ASTM D5185(m)		56	49	---
Manganese	ppm	ASTM D5185(m)		0	1	---
Magnesium	ppm	ASTM D5185(m)		972	931	---
Calcium	ppm	ASTM D5185(m)		1095	1330	---
Phosphorus	ppm	ASTM D5185(m)		991	838	---
Zinc	ppm	ASTM D5185(m)		1214	950	---
Sulfur	ppm	ASTM D5185(m)		2425	1907	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.3	44.9	---
Visc @ 100°C	cSt	ASTM D7279(m)		13.1	12.4	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0281032
Lab Number : 02624905
Unique Number : 5750024
Test Package : MOB 1
Received : 27 Mar 2024
Tested : 27 Mar 2024
Diagnosed : 27 Mar 2024 - Wes Davis

Amix Recycling
 11698 140 Street
 Surrey, BC
 CA V3R 2V4
 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:
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