



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL



Machine Id
LIEBHERR R914 056971-1511
Component
Diesel Engine
Fluid
PETRO CANADA 10W40 (15 LTR)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0284027	---	---
Sample Date		Client Info		14 Feb 2024	---	---
Machine Age	hrs	Client Info		480	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	27	---	---
Chromium	ppm	ASTM D5185(m)	>5	4	---	---
Nickel	ppm	ASTM D5185(m)	>5	<1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>3	0	---	---
Aluminum	ppm	ASTM D5185(m)	>15	12	---	---
Lead	ppm	ASTM D5185(m)	>30	2	---	---
Copper	ppm	ASTM D5185(m)	>125	19	---	---
Tin	ppm	ASTM D5185(m)	>5	<1	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---

CONTAMINATION

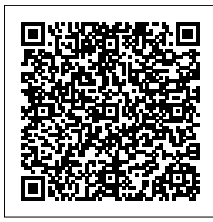
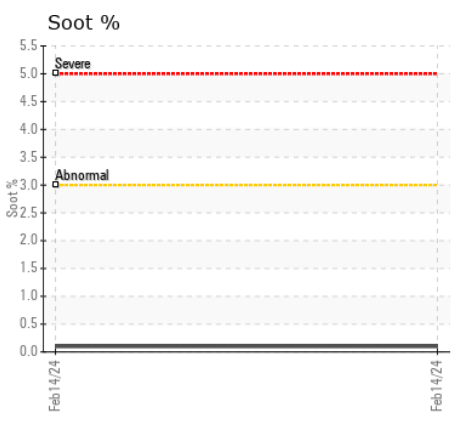
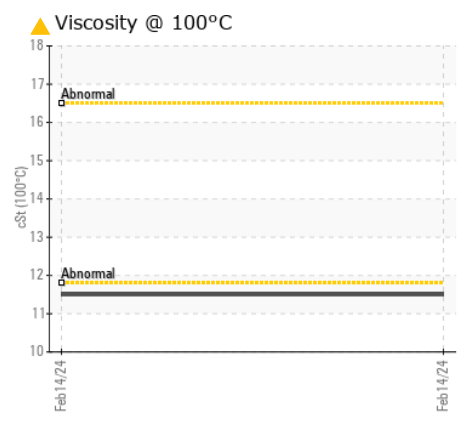
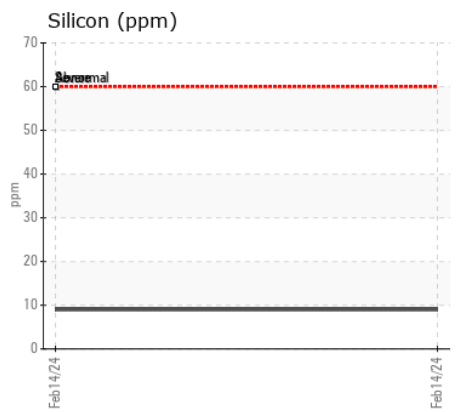
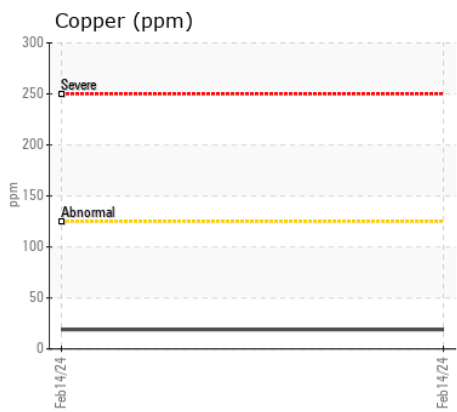
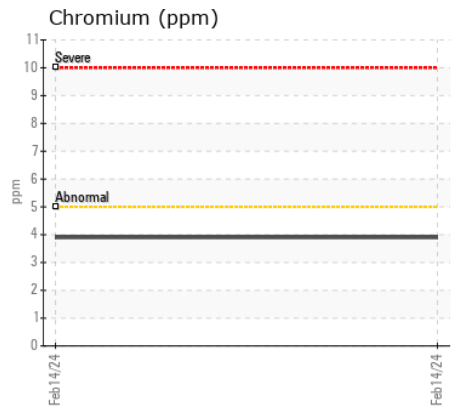
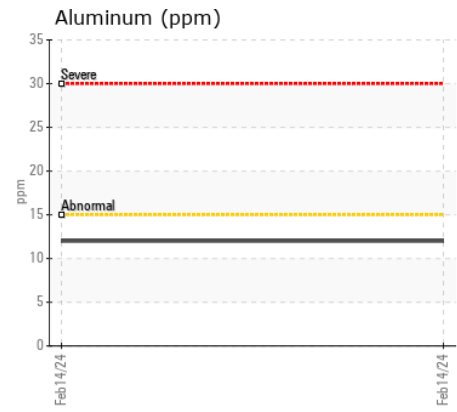
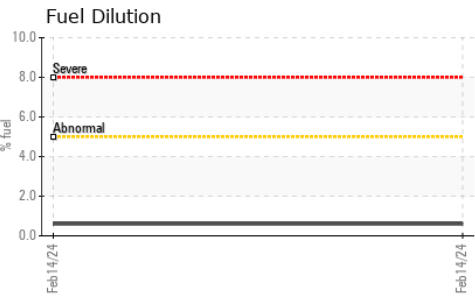
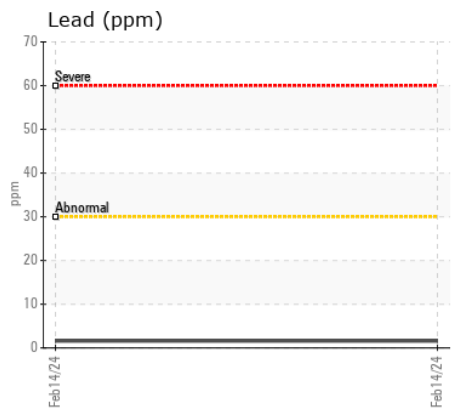
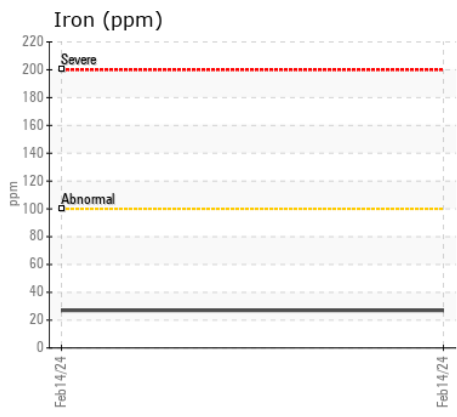
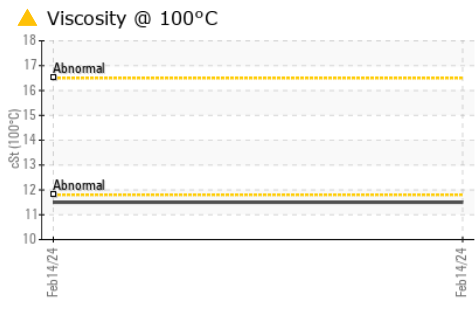
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	9	---	---
Potassium	ppm	ASTM D5185(m)	>20	4	---	---
Fuel	%	ASTM D7593*	>5	0.6	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>3	0.1	---	---
Nitration	Abs/cm	ASTM D7624*	>20	8.2	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.0	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>20	3	---	---
Boron	ppm	ASTM D5185(m)		44	---	---
Barium	ppm	ASTM D5185(m)		3	---	---
Molybdenum	ppm	ASTM D5185(m)		6	---	---
Manganese	ppm	ASTM D5185(m)		2	---	---
Magnesium	ppm	ASTM D5185(m)		668	---	---
Calcium	ppm	ASTM D5185(m)		1269	---	---
Phosphorus	ppm	ASTM D5185(m)		733	---	---
Zinc	ppm	ASTM D5185(m)		796	---	---
Sulfur	ppm	ASTM D5185(m)		2622	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.0	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		▲ 11.5	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0284027 **Received** : 16 Feb 2024
Lab Number : 02616185 **Tested** : 20 Feb 2024
Unique Number : 5733295 **Diagnosed** : 20 Feb 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

WEKA HOLDINGS LTD
 2754 WOODLAND DRIVE
 VANCOUVER, BC
 CA V5N 3P8
 Contact: Cam Turtle

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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F: