



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR L566 054116-1484
Component
Diesel Engine
Fluid
PETRO CANADA 10W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0281149	LH0135615	LH0135643
Sample Date		Client Info		04 Jan 2024	03 Mar 2022	10 Dec 2020
Machine Age	hrs	Client Info		9598	6050	3800
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	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	4	4
Chromium	ppm	ASTM D5185(m)	>5	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>15	1	1	2
Lead	ppm	ASTM D5185(m)	>30	<1	0	1
Copper	ppm	ASTM D5185(m)	>125	<1	2	19
Tin	ppm	ASTM D5185(m)	>5	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

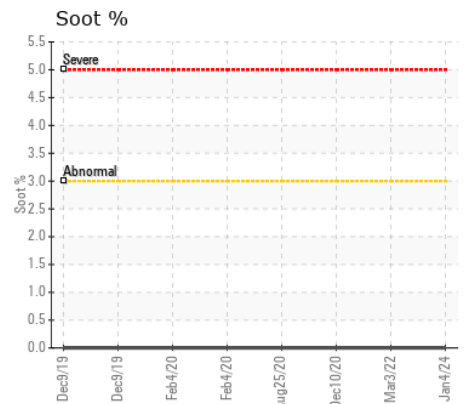
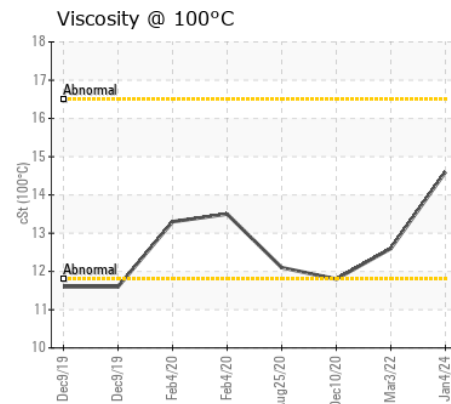
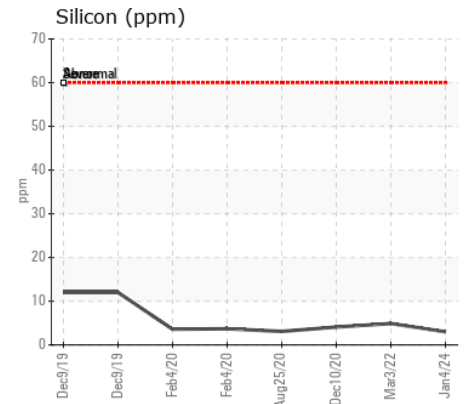
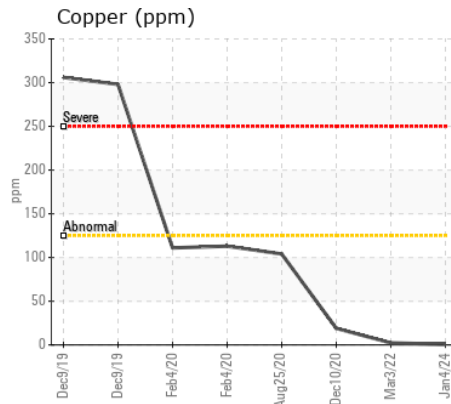
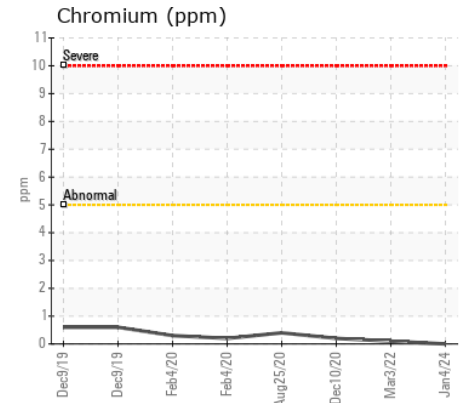
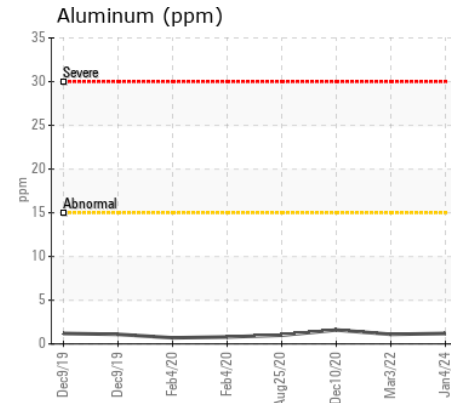
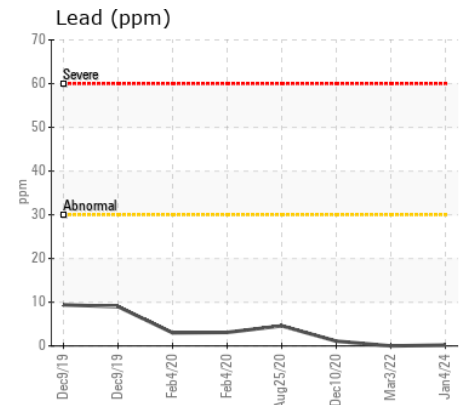
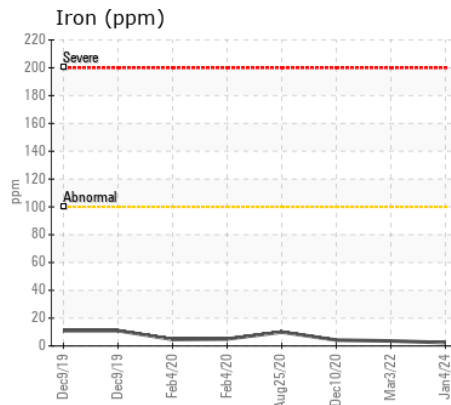
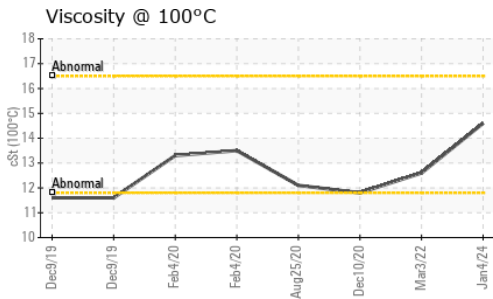
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	3	5	4
Potassium	ppm	ASTM D5185(m)	>20	2	0	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	7.0	8.9	7.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.1	21.7	19.2
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)	>20	2	4	2
Boron	ppm	ASTM D5185(m)		99	19	18
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		6	54	50
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		164	1071	966
Calcium	ppm	ASTM D5185(m)		1726	778	727
Phosphorus	ppm	ASTM D5185(m)		846	988	865
Zinc	ppm	ASTM D5185(m)		1015	1139	1083
Sulfur	ppm	ASTM D5185(m)		2823	2801	2634
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.2	18.5	16.9
Visc @ 100°C	cSt	ASTM D7279(m)		14.6	12.6	11.8



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0281149 **Received** : 10 Jan 2024
Lab Number : 02607773 **Diagnosed** : 10 Jan 2024
Unique Number : 5708859 **Diagnostician** : Kevin Marson
Test Package : MOB 1

Abbycel Substrate Ltd.
 3545 Ross Road
 Abbotsford, BC
 CA V4X 1M6
 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.

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