



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[20240023]
 Machine Id
LIEBHERR A924C 063156-1049
 Component
Diesel Engine
 Fluid
PETRO CANADA 10W30 (29 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0278548	LH	LH0260144
Sample Date		Client Info		19 Jan 2024	04 Oct 2023	28 Apr 2023
Machine Age	hrs	Client Info		21415	0	20008
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	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	15	31	26
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	0	0
Titanium	ppm	ASTM D5185(m)		0	4	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>15	1	<1	2
Lead	ppm	ASTM D5185(m)	>30	1	3	7
Copper	ppm	ASTM D5185(m)	>125	10	63	237
Tin	ppm	ASTM D5185(m)	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

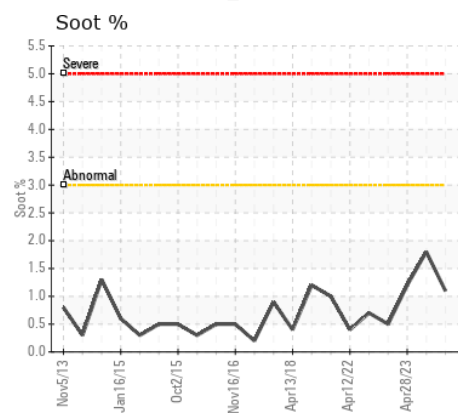
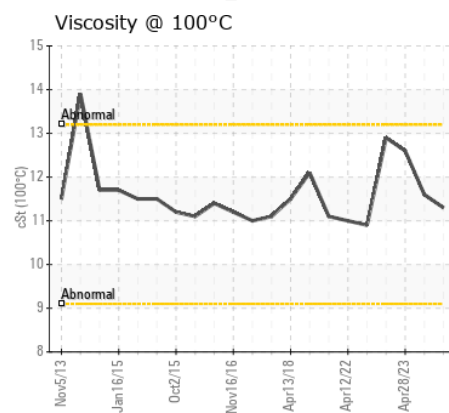
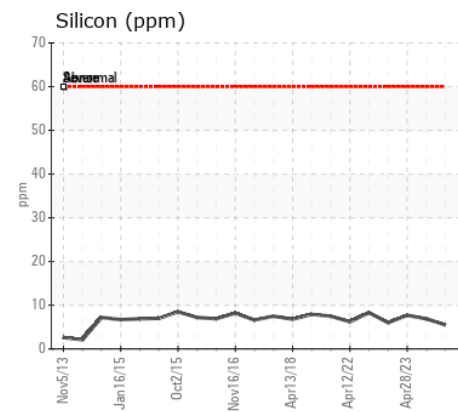
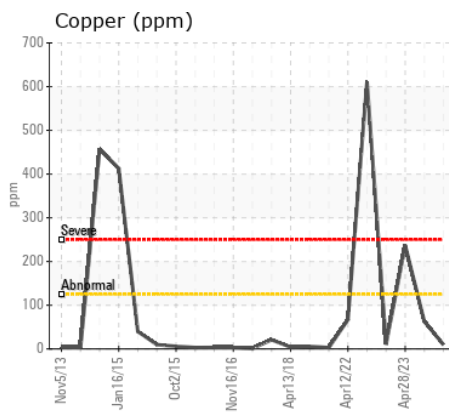
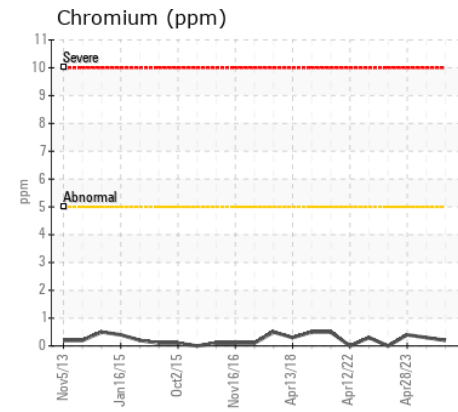
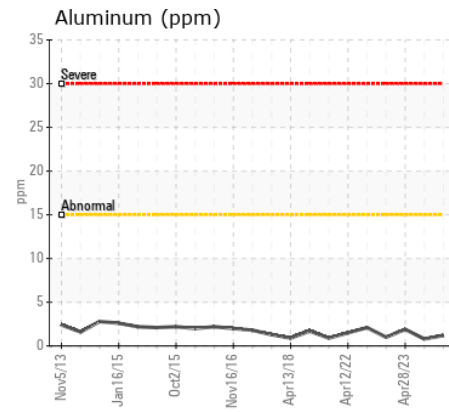
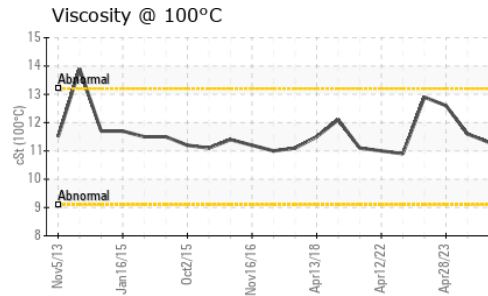
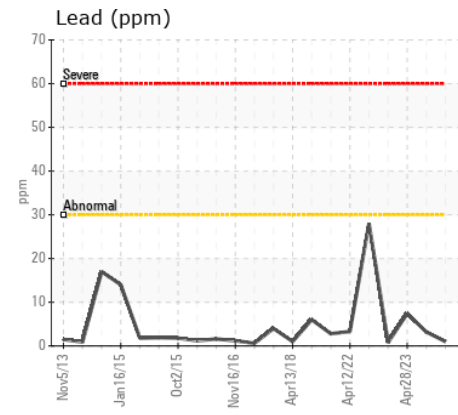
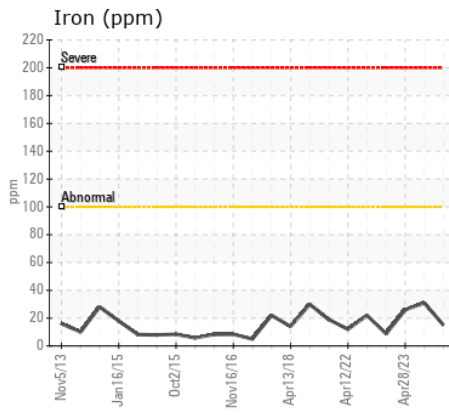
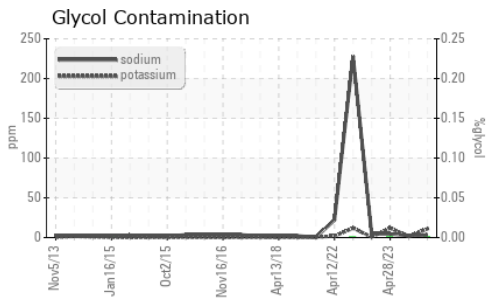
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>60	6	7	8
Potassium	ppm	ASTM D5185(m)	>20	11	1	12
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	NEG	0.0
Soot %	%	ASTM D7844*	>3	1.1	1.8	1.2
Nitration	Abs/cm	ASTM D7624*	>20	8.2	9.8	10.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.9	23.6	22.2
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)		3	3	4
Boron	ppm	ASTM D5185(m)		<1	6	1
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		62	62	71
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)		984	1002	1109
Calcium	ppm	ASTM D5185(m)		1088	1152	1328
Phosphorus	ppm	ASTM D5185(m)		1030	1012	1175
Zinc	ppm	ASTM D5185(m)		1208	1253	1314
Sulfur	ppm	ASTM D5185(m)		2701	2266	2544
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.1	17.4	16.9
Visc @ 100°C	cSt	ASTM D7279(m)		11.3	11.6	12.6



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0278548 **Received** : 24 Jan 2024
Lab Number : 02610857 **Diagnosed** : 24 Jan 2024
Unique Number : 5719952 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol)

Urban Mine
 72 Rothwell Rd.
 Winnipeg, MB
 CA R3P 2H7
 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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