



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL



Machine Id
LIEBHERR L556 053602-1484
Component
Transmission (Manual)
Fluid
PETRO CANADA DURATRAN (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0278832	LH0237709	LH0270376
Sample Date		Client Info		11 Jan 2024	13 Oct 2023	14 Jul 2023
Machine Age	hrs	Client Info		7741	7226	6154
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	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>200	16	12	16
Chromium	ppm	ASTM D5185(m)	>5	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>7	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	2	1	1
Lead	ppm	ASTM D5185(m)	>45	0	0	0
Copper	ppm	ASTM D5185(m)	>225	<1	1	<1
Tin	ppm	ASTM D5185(m)	>10	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

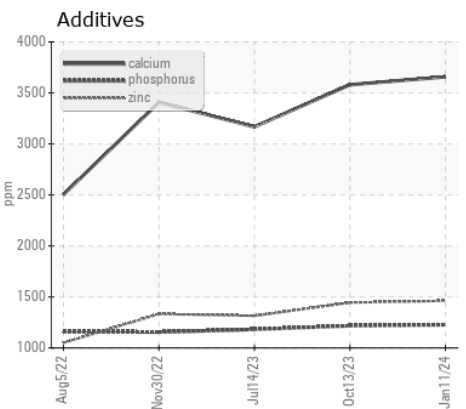
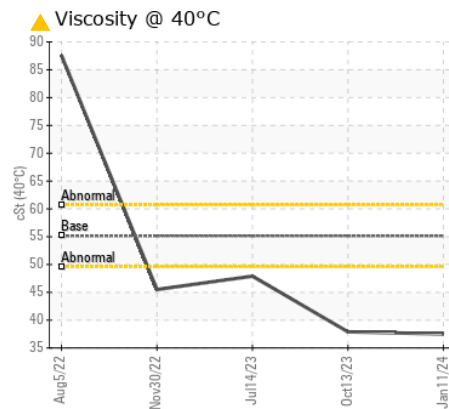
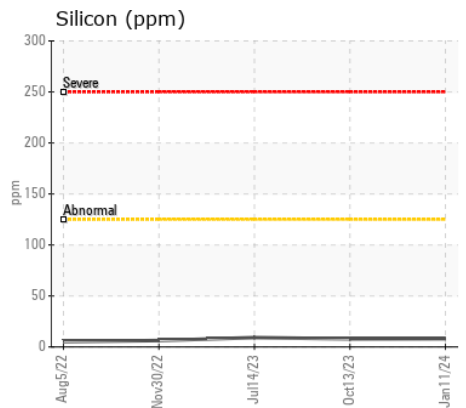
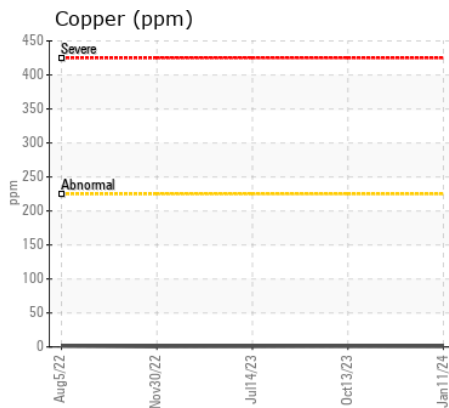
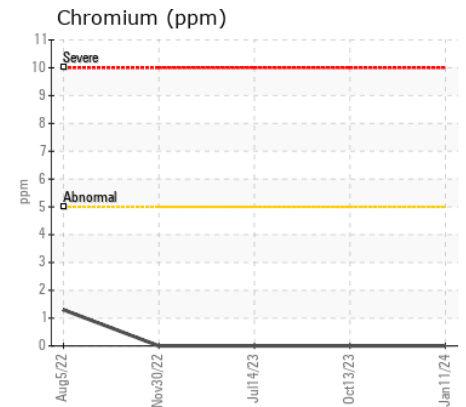
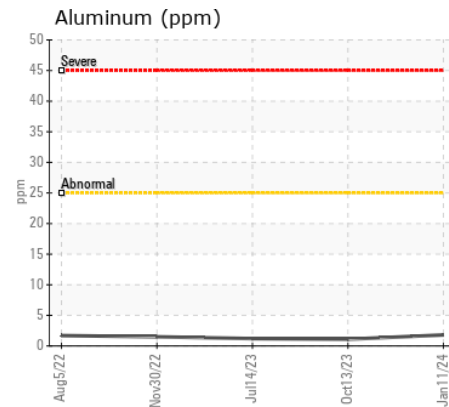
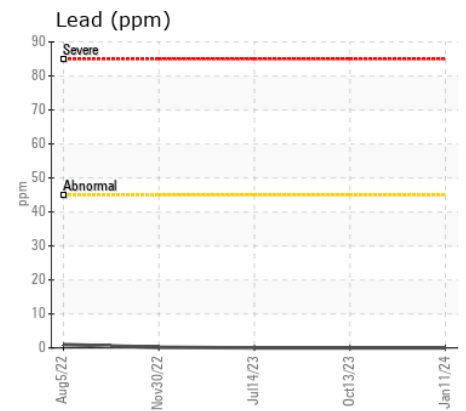
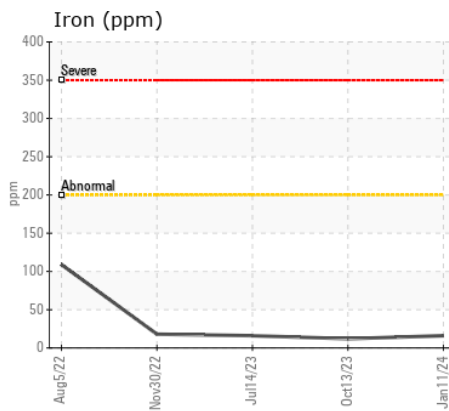
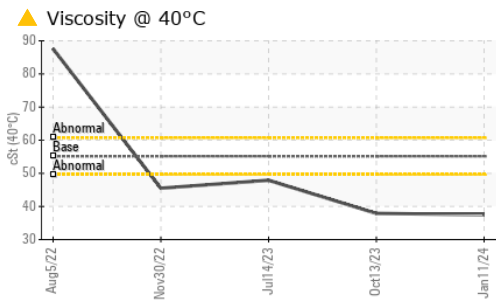
There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185(m)	>125	8	8	9
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	NONE	VLITE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 70W80 range, advise investigate. The condition of the fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<1	1	1
Boron	ppm	ASTM D5185(m)	110	100	98	83
Barium	ppm	ASTM D5185(m)	0.0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	0.0	0	0	<1
Manganese	ppm	ASTM D5185(m)	1	0	0	<1
Magnesium	ppm	ASTM D5185(m)	13	12	10	12
Calcium	ppm	ASTM D5185(m)	3610	3658	3580	3168
Phosphorus	ppm	ASTM D5185(m)	1192	1227	1217	1182
Zinc	ppm	ASTM D5185(m)	1455	1462	1444	1315
Sulfur	ppm	ASTM D5185(m)	2641	3205	3238	3146
Visc @ 40°C	cSt	ASTM D7279(m)	55.14	▲ 37.5	▲ 37.9	47.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **THOMAS CAVANAGH CONSTRUCTION LTD**
Sample No. : LH0278832 **Received** : 17 Jan 2024 **RR # 2, 9094 CAVANAGH ROAD**
Lab Number : 02609441 **Diagnosed** : 17 Jan 2024 **ASHTON, ON**
Unique Number : 5710527 **Diagnostician** : Kevin Marson **CA K0A 1B0**
Test Package : MOB 1 **Contact: Keith**

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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