



# LIEBHERR

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area  
**(336342)**  
Machine Id  
**LIEBHERR A918 109052-1508**  
Component  
**Transmission (Auto)**  
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		LH0281477	LH0237730	LH0239633
Sample Date		Client Info		09 Jan 2024	15 Jun 2023	30 Aug 2022
Machine Age	hrs	Client Info		4997	3985	3011
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		None	None	N/A
Sample Status				NORMAL	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>160	45	54	70
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>5	0	0	0
Aluminum	ppm	ASTM D5185(m)	>50	2	3	4
Lead	ppm	ASTM D5185(m)	>50	<1	1	2
Copper	ppm	ASTM D5185(m)	>225	36	44	63
Tin	ppm	ASTM D5185(m)	>10	1	1	2
Vanadium	ppm	ASTM D5185(m)		0	0	<1
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

### CONTAMINATION

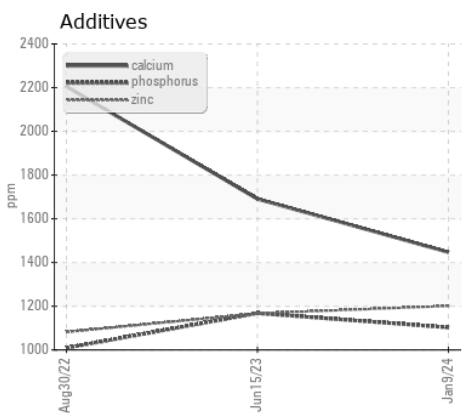
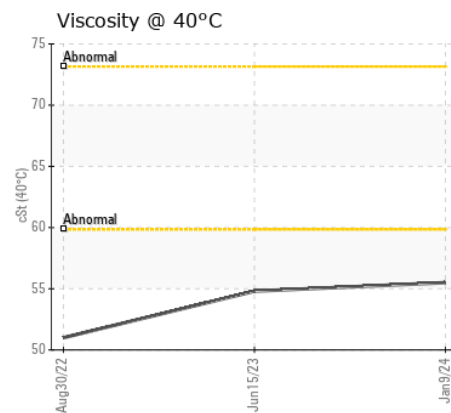
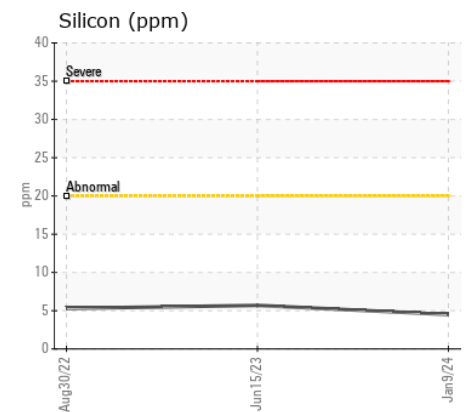
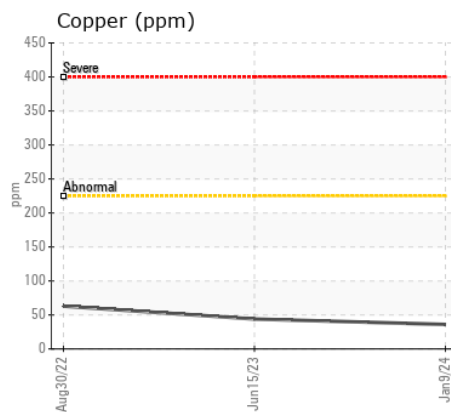
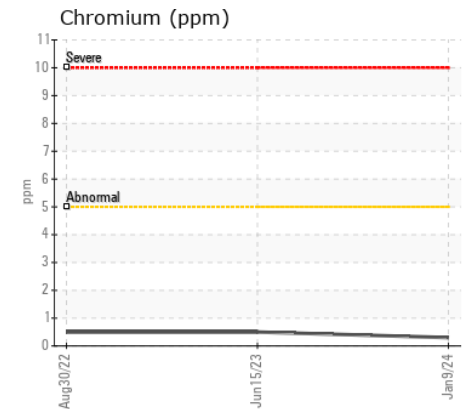
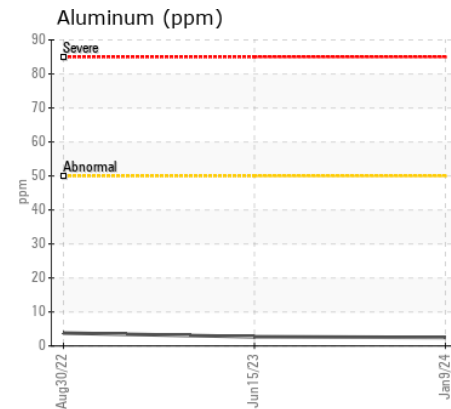
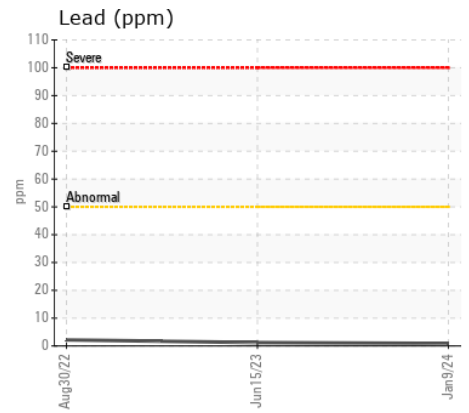
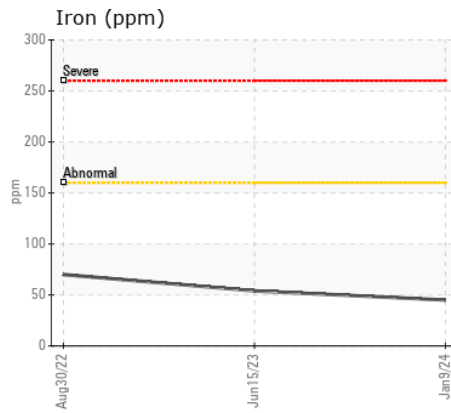
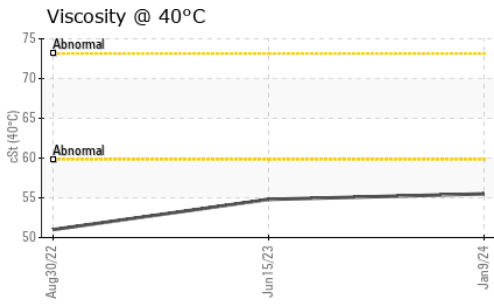
There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185(m)	>20	4	6	5
Potassium	ppm	ASTM D5185(m)	>20	1	1	2
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	VLITE	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 20 range, advise investigate. The condition of the fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>20	8	12	21
Boron	ppm	ASTM D5185(m)		2	3	5
Barium	ppm	ASTM D5185(m)		<1	<1	<1
Molybdenum	ppm	ASTM D5185(m)		51	43	24
Manganese	ppm	ASTM D5185(m)		7	9	13
Magnesium	ppm	ASTM D5185(m)		831	714	377
Calcium	ppm	ASTM D5185(m)		1447	1691	2205
Phosphorus	ppm	ASTM D5185(m)		1103	1168	1009
Zinc	ppm	ASTM D5185(m)		1201	1167	1082
Sulfur	ppm	ASTM D5185(m)		4134	4809	6677
Visc @ 40°C	cSt	ASTM D7279(m)		55.5	54.8	51.0



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **THOMAS CAVANAGH CONSTRUCTION LTD**  
**Sample No.** : LH0281477 **Received** : 23 Jan 2024 **RR # 2, 9094 CAVANAGH ROAD**  
**Lab Number** : 02610648 **Diagnosed** : 23 Jan 2024 **ASHTON, ON**  
**Unique Number** : 5711734 **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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