



# LIEBHERR

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area  
**(351146)**  
Machine Id  
**LIEBHERR A918 131283-1508**  
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		LH0286695	LH0274419	LH0242420
Sample Date		Client Info		23 Jun 2024	18 Aug 2023	01 Nov 2022
Machine Age	hrs	Client Info		3983	2990	2002
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	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>160	47	61	63
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	0	<1
Titanium	ppm	ASTM D5185(m)		<1	<1	<1
Silver	ppm	ASTM D5185(m)	>5	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>50	2	3	4
Lead	ppm	ASTM D5185(m)	>50	1	5	5
Copper	ppm	ASTM D5185(m)	>225	64	92	108
Tin	ppm	ASTM D5185(m)	>10	1	2	2
Vanadium	ppm	ASTM D5185(m)		0	0	<1
White Metal	scalar	Visual*	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	Visual*	NONE	VLITE	NONE	NONE

### CONTAMINATION

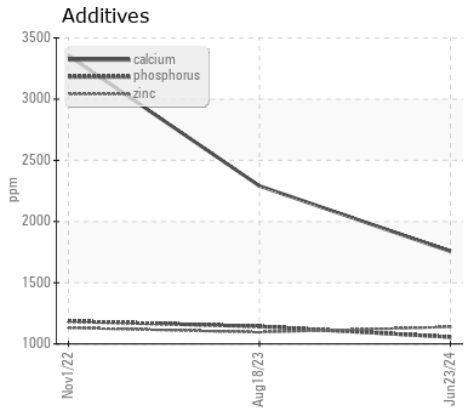
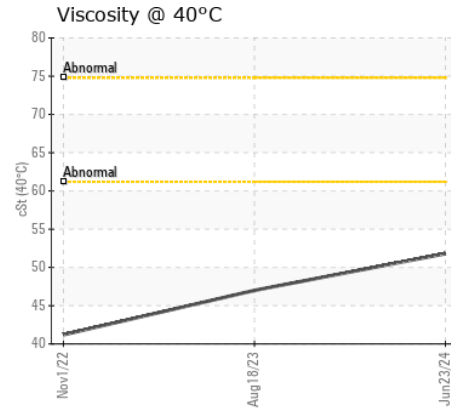
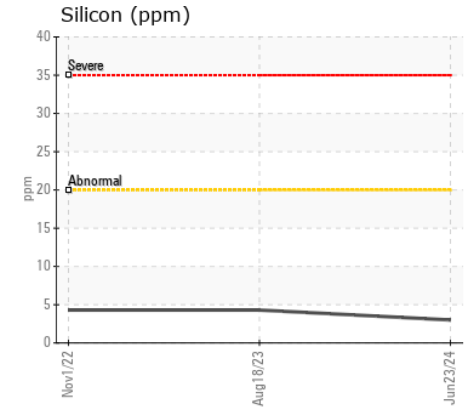
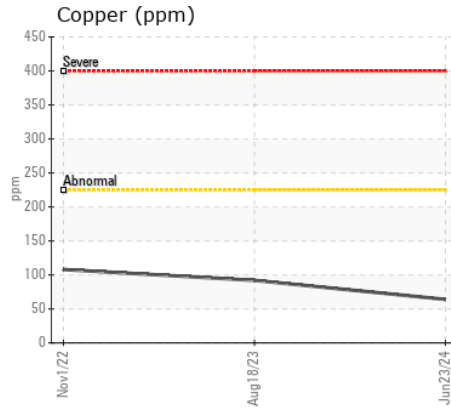
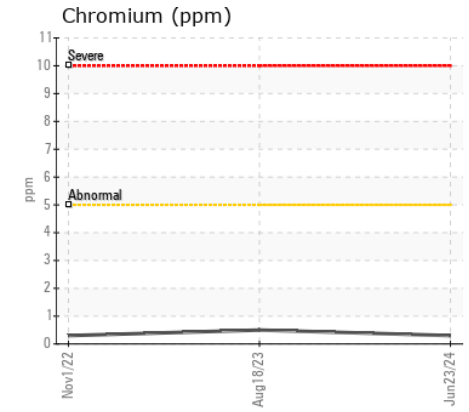
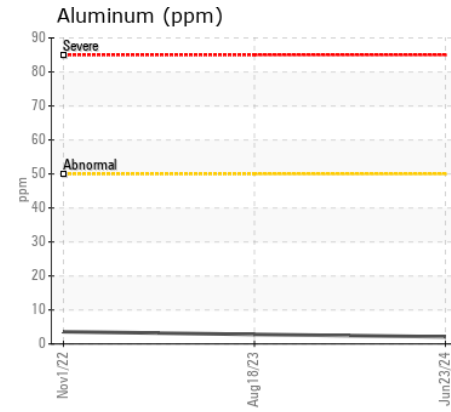
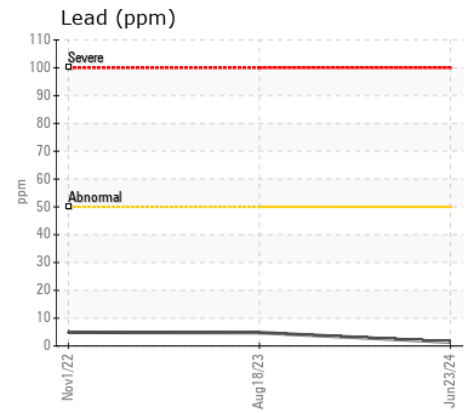
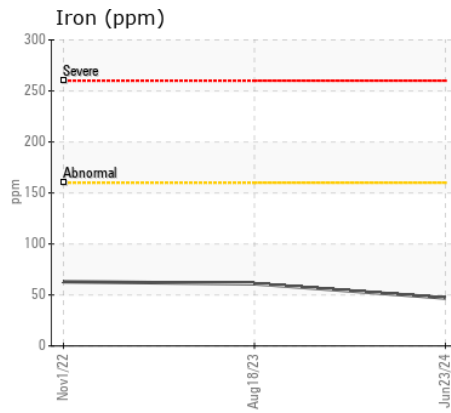
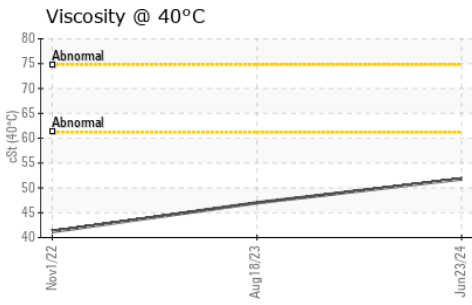
There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185(m)	>20	3	4	4
Potassium	ppm	ASTM D5185(m)	>20	3	3	5
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	VLITE	NONE
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 20 range, advise investigate. The condition of the fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>20	19	33	50
Boron	ppm	ASTM D5185(m)		11	21	5
Barium	ppm	ASTM D5185(m)		<1	<1	1
Molybdenum	ppm	ASTM D5185(m)		38	20	0
Manganese	ppm	ASTM D5185(m)		10	14	21
Magnesium	ppm	ASTM D5185(m)		629	315	7
Calcium	ppm	ASTM D5185(m)		1756	2291	3356
Phosphorus	ppm	ASTM D5185(m)		1056	1143	1186
Zinc	ppm	ASTM D5185(m)		1139	1095	1132
Sulfur	ppm	ASTM D5185(m)		5316	7162	8300
Visc @ 40°C	cSt	ASTM D7279(m)		51.8	47.0	41.2



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0286695  
**Lab Number** : 02644229  
**Unique Number** : 5801768  
**Test Package** : MOB 1  
**Received** : 26 Jun 2024  
**Tested** : 26 Jun 2024  
**Diagnosed** : 27 Jun 2024 - Kevin Marson

**THOMAS CAVANAGH CONSTRUCTION LTD**  
 RR # 2, 9094 CAVANAGH ROAD  
 ASHTON, ON  
 CA K0A 1B0  
 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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