



# LIEBHERR

## OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**LIEBHERR L586 068244**

Component  
**Transmission (Manual)**

Fluid  
**PETRO CANADA TRAXON 75W90 SYNTHETIC (--- GAL)**

### RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.  
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0278599</b>	LH0278521	LH
Sample Date		Client Info		<b>21 Feb 2024</b>	22 Dec 2023	15 Sep 2023
Machine Age	hrs	Client Info		<b>8026</b>	7142	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>200	<b>9</b>	6	7
Chromium	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>7	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	<b>2</b>	1	<1
Lead	ppm	ASTM D5185(m)	>45	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m)	>225	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

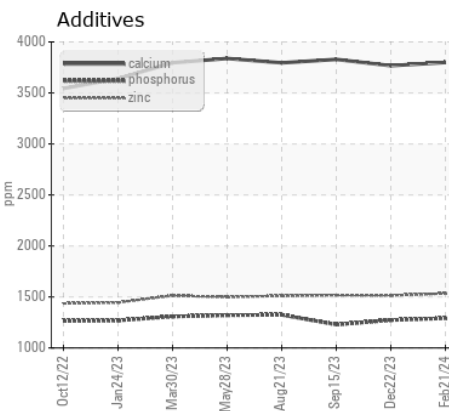
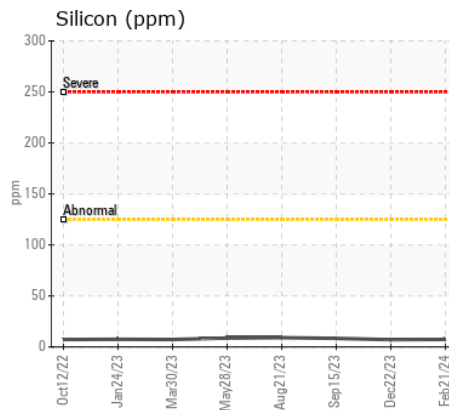
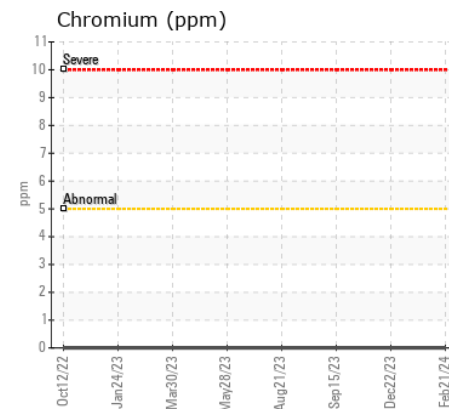
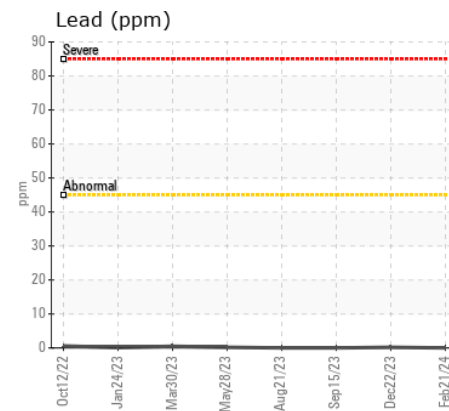
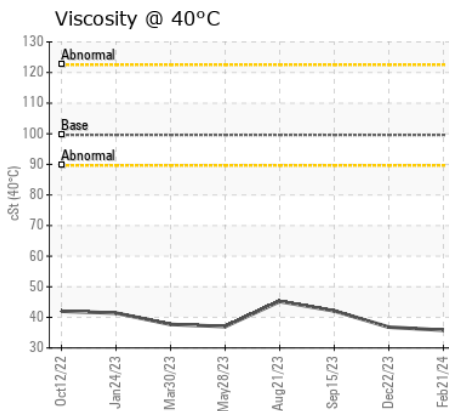
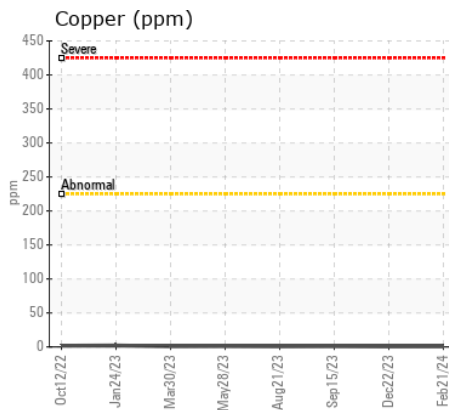
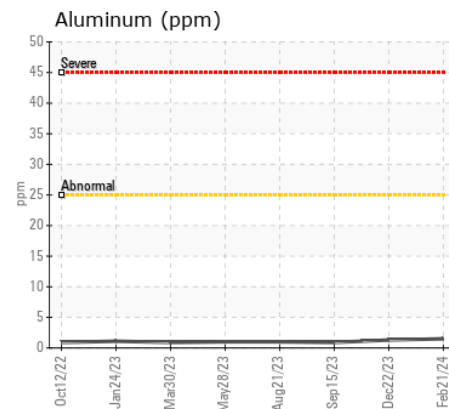
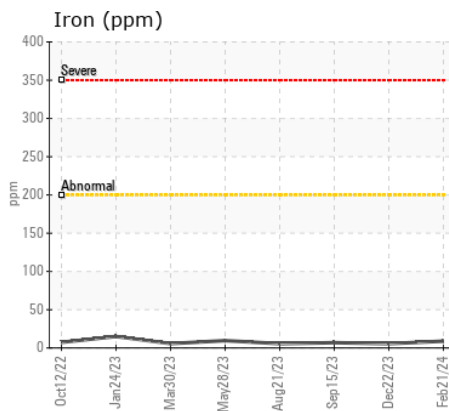
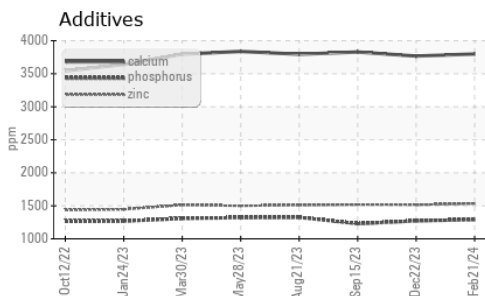
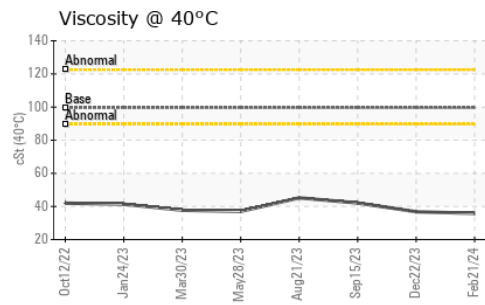
There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185(m)	>125	<b>7</b>	7	8
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of fluid.  
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)		<b>2</b>	1	6
Boron	ppm	ASTM D5185(m)	328	<b>104</b>	107	110
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	1	<b>15</b>	13	11
Calcium	ppm	ASTM D5185(m)	7	<b>3799</b>	3767	3829
Phosphorus	ppm	ASTM D5185(m)	1145	<b>1291</b>	1273	1229
Zinc	ppm	ASTM D5185(m)	3	<b>1534</b>	1515	1518
Sulfur	ppm	ASTM D5185(m)	17909	<b>3271</b>	3238	3216
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	<b>35.8</b>	36.8	42.1



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0278599  
**Lab Number** : 02619608  
**Unique Number** : 5736718  
**Test Package** : MOB 1  
**Received** : 04 Mar 2024  
**Tested** : 04 Mar 2024  
**Diagnosed** : 05 Mar 2024 - Kevin Marson

**Gerdau - Mandak Metal Processors Ltd.,**  
 1 Railway St., P.O. Box 334  
 Selkirk, MB  
 CA R1A 2B3  
 Contact: Santiago Giraldo  
 santiago.giraldo@gerdau.com  
 T:  
 F: (204)482-8241

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.