



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR R936 042128-1146**

Component  
**Swing Drive**

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

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0281346</b>	LH0138979	LH0133367
Sample Date		Client Info		<b>17 Jan 2024</b>	29 Oct 2020	31 Oct 2018
Machine Age	hrs	Client Info		<b>5548</b>	2069	88
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>	Changed	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>750	<b>22</b>	147	86
Chromium	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>5	<b>0</b>	4	<1
Copper	ppm	ASTM D5185(m)	>250	<b>&lt;1</b>	172	25
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	2	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

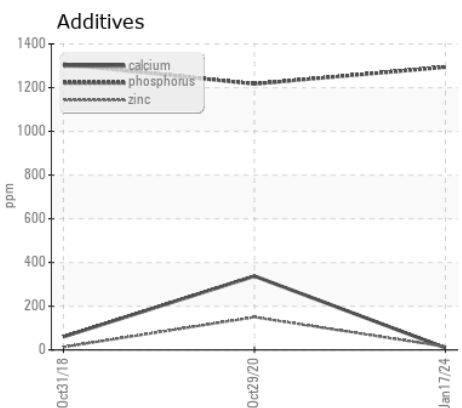
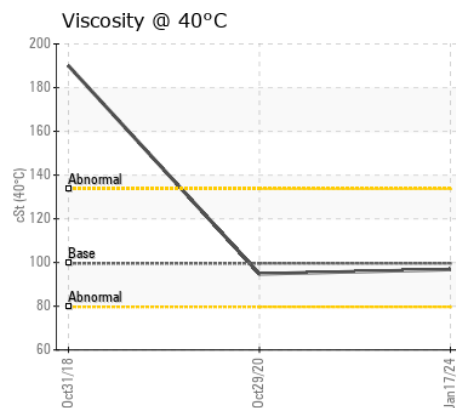
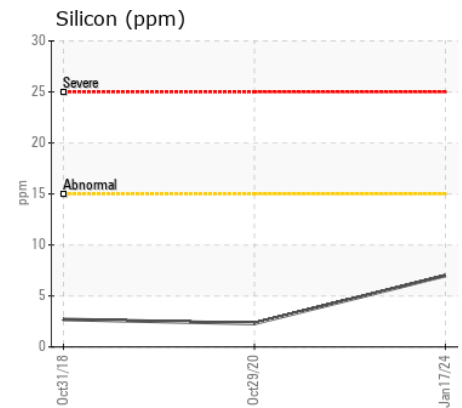
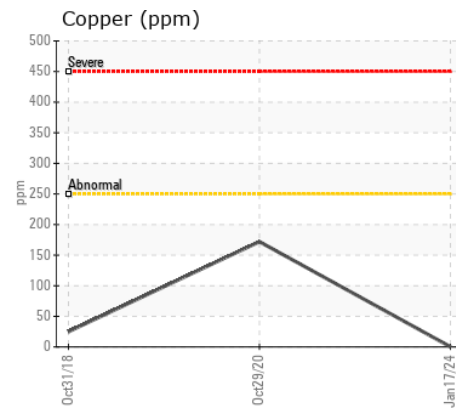
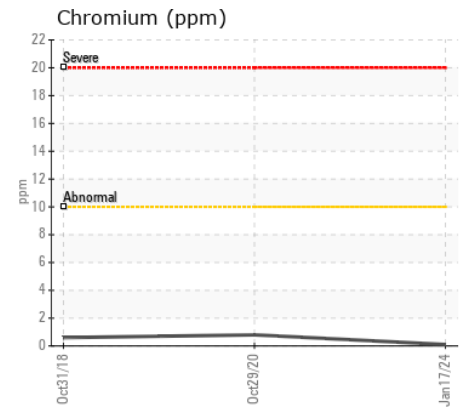
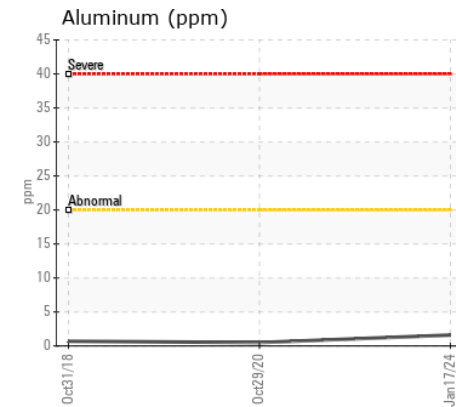
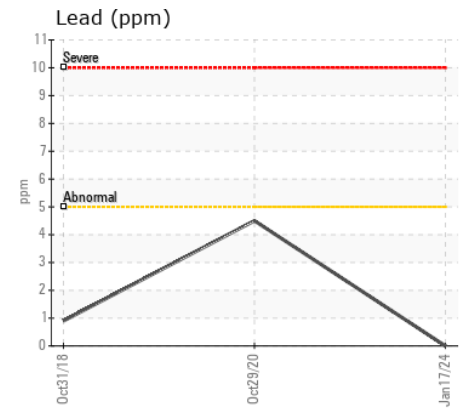
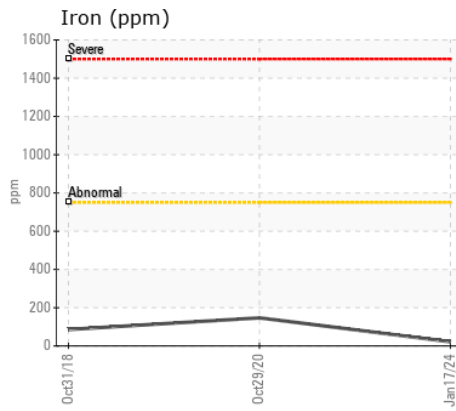
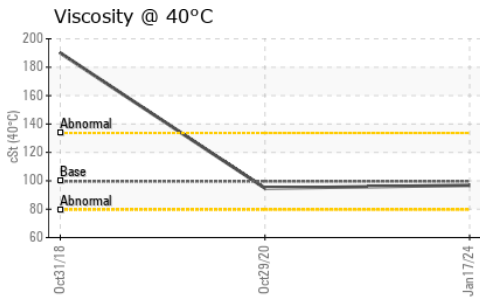
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	<b>7</b>	2	3
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	Visual*	NONE	<b>VLITE</b>	NONE	LIGHT
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*	>0.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>1</b>	2	4
Boron	ppm	ASTM D5185(m)	328	<b>284</b>	258	5
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185(m)		<b>0</b>	1	2
Magnesium	ppm	ASTM D5185(m)	1	<b>2</b>	8	2
Calcium	ppm	ASTM D5185(m)	7	<b>10</b>	338	60
Phosphorus	ppm	ASTM D5185(m)	1145	<b>1294</b>	1217	1307
Zinc	ppm	ASTM D5185(m)	3	<b>15</b>	150	13
Sulfur	ppm	ASTM D5185(m)	17909	<b>21054</b>	19898	23945
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	<b>96.8</b>	▲ 94.8	190



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

**Sample No.** : LH0281346

**Lab Number** : 02619352

**Unique Number** : 5736462

**Test Package** : MOB 1

**Received** : 01 Mar 2024

**Tested** : 01 Mar 2024

**Diagnosed** : 01 Mar 2024 - Wes Davis

**American Iron and Metal**

997 CARPIN BEACH RD

SAULT ST MARIE, ON

CA P6A 6K4

Contact: Service Manager

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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F: