



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR A934 061746-1418**  
Component  
**Swing Drive**  
Fluid  
**PETRO CANADA TRAXON 75W90 SYNTHETIC (7 LTR)**

### RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH</b>	LH0251450	LH0151787
Sample Date		Client Info		<b>11 Apr 2024</b>	09 Jan 2023	14 Nov 2019
Machine Age	hrs	Client Info		<b>13245</b>	13240	11646
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>Not Changd</b>	Not Changd	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	SEVERE	SEVERE

### WEAR

Lead ppm levels are abnormal. Bearing wear is indicated.

Iron	ppm	ASTM D5185(m)	>1700	<b>451</b>	424	▲ 2402
Chromium	ppm	ASTM D5185(m)	>15	<b>3</b>	3	12
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	2
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	2
Aluminum	ppm	ASTM D5185(m)	>4	<b>1</b>	1	<1
Lead	ppm	ASTM D5185(m)	>10	▲ <b>12</b>	10	▲ 20
Copper	ppm	ASTM D5185(m)	>550	<b>421</b>	410	▲ 692
Tin	ppm	ASTM D5185(m)	>30	<b>4</b>	4	▲ 42
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

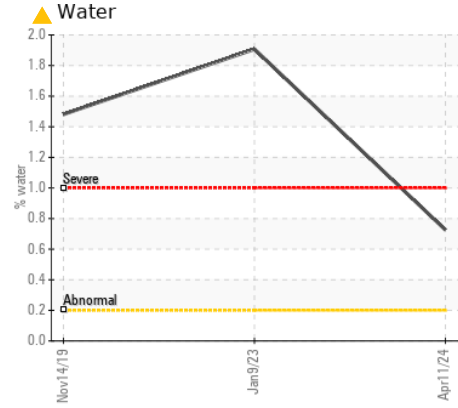
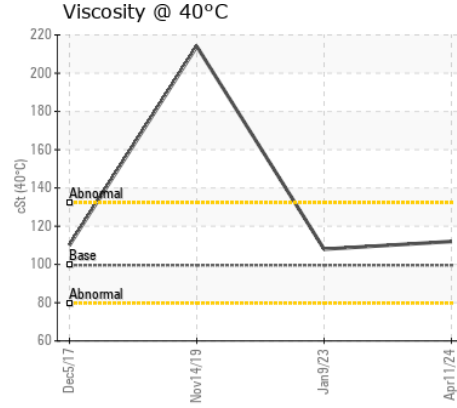
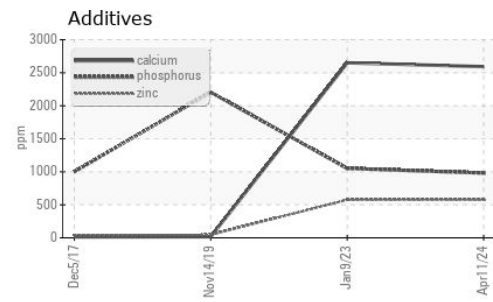
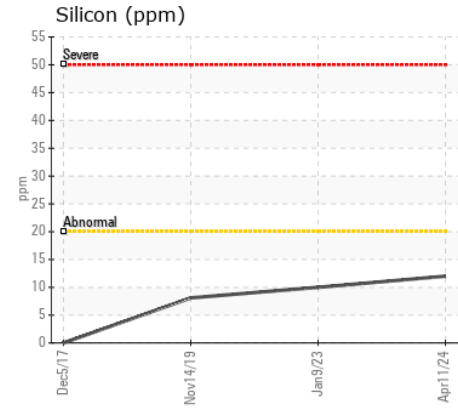
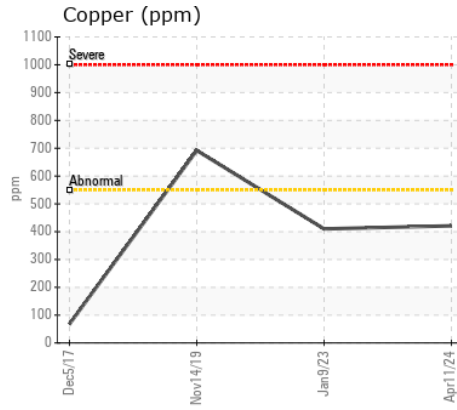
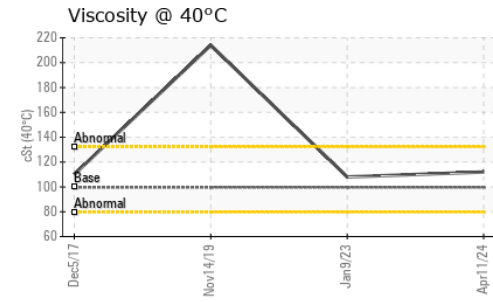
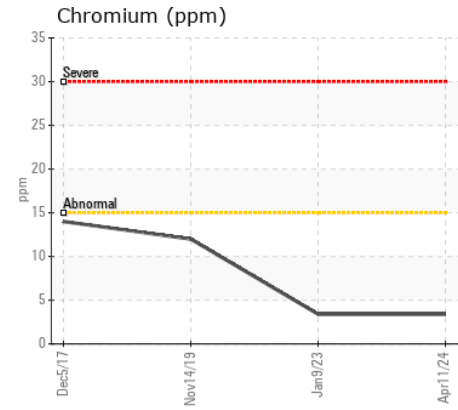
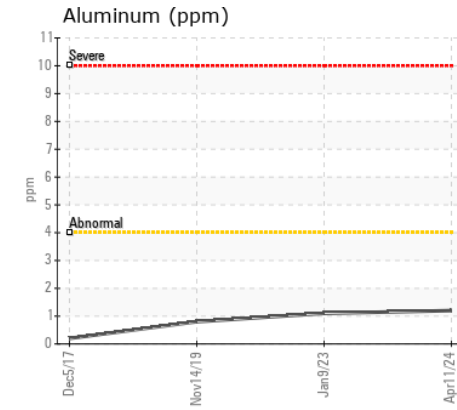
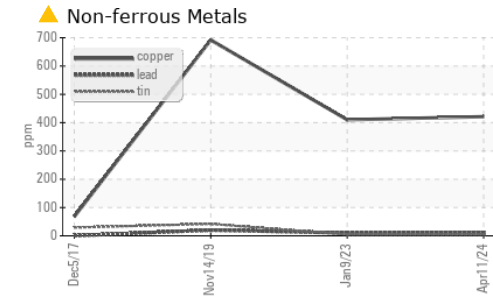
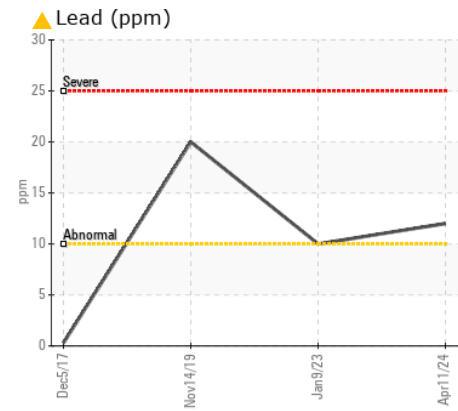
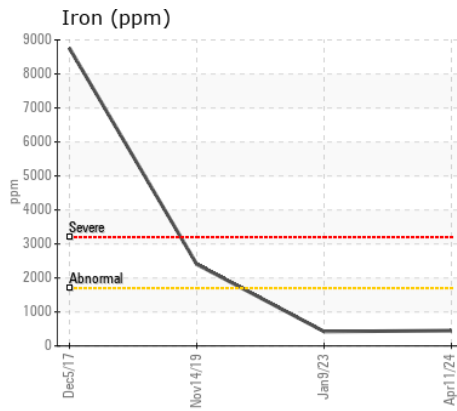
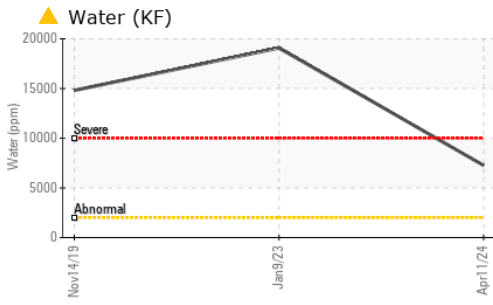
There is a moderate concentration of water present in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>12</b>	10	8
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	3	3
Water	%	ASTM D6304*	>0.2	▲ <b>0.726</b>	▲ 1.907	▲ 1.481
ppm Water	ppm	ASTM D6304*	>2000	▲ <b>7263</b>	▲ 19077.3	▲ 14810
Silt	scalar	Visual*	NONE	<b>LIGHT</b>	LIGHT	NONE
Debris	scalar	Visual*	NONE	<b>VLITE</b>	NONE	VLITE
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>1%</b>	▲ .2%	▲ .2%

### FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)		<b>2</b>	3	1
Boron	ppm	ASTM D5185(m)	328	<b>66</b>	73	45
Barium	ppm	ASTM D5185(m)	1	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Manganese	ppm	ASTM D5185(m)		<b>4</b>	4	20
Magnesium	ppm	ASTM D5185(m)	1	<b>7</b>	6	<1
Calcium	ppm	ASTM D5185(m)	7	<b>2592</b>	2650	16
Phosphorus	ppm	ASTM D5185(m)	1145	<b>981</b>	1052	2205
Zinc	ppm	ASTM D5185(m)	3	<b>577</b>	576	45
Sulfur	ppm	ASTM D5185(m)	17909	<b>5800</b>	5784	23710
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	<b>112</b>	108	▲ 214



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH **Received** : 12 Apr 2024  
**Lab Number** : **02628532** **Tested** : 15 Apr 2024  
**Unique Number** : 5761664 **Diagnosed** : 15 Apr 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: KF )

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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