



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR HS8100 184920**

Component  
**Boom Winch**

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

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LH0289638</b>	LH0222278	LH
Sample Date		Client Info		<b>17 May 2024</b>	07 Jul 2023	06 Jun 2022
Machine Age	hrs	Client Info		<b>16088</b>	14431	11839
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>	N/A	Changed
Filter Changed		Client Info		<b>None</b>	None	None
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>150	<b>18</b>	30	42
Chromium	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>15	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>80	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)		<b>0</b>	0	0
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

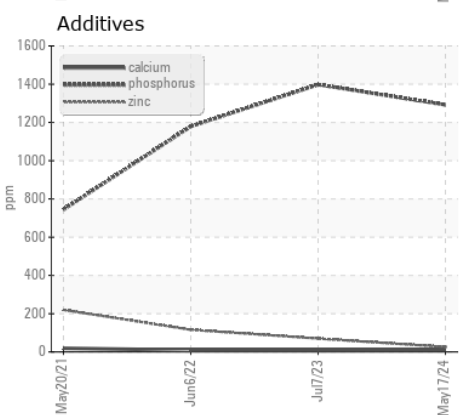
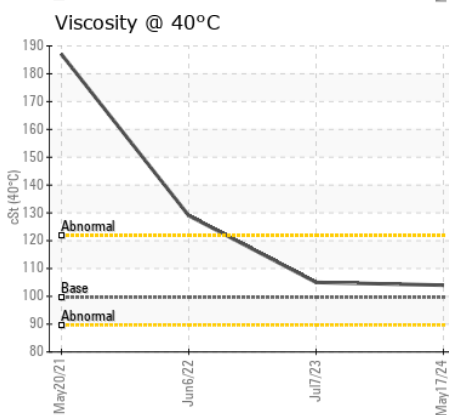
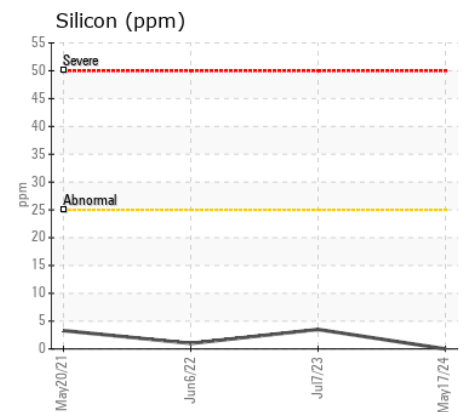
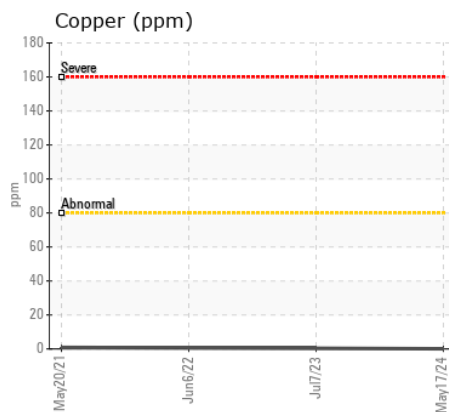
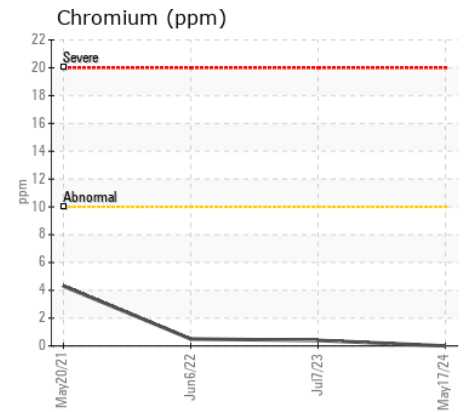
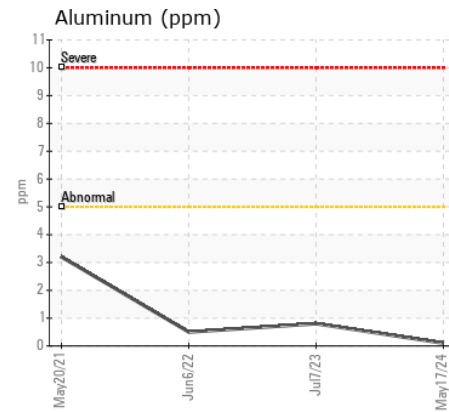
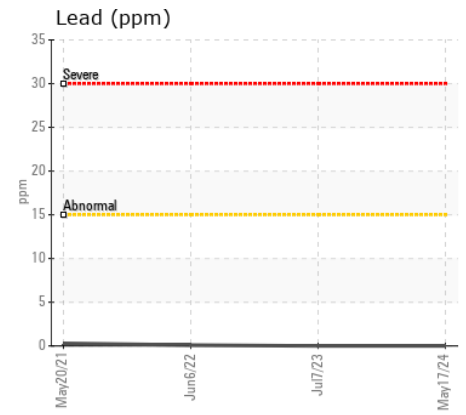
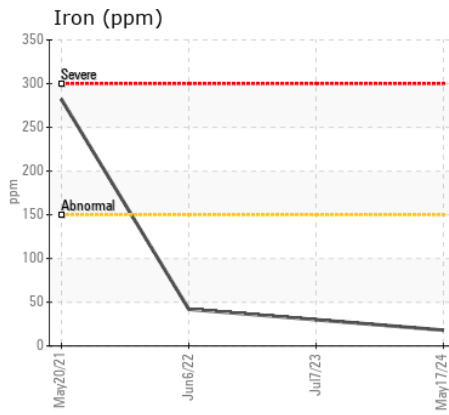
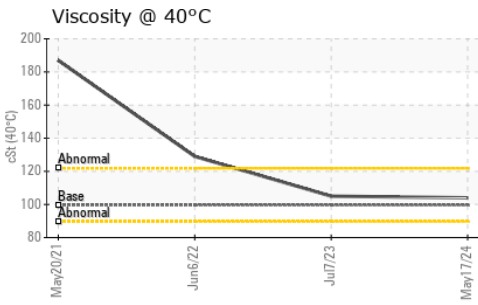
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>0</b>	4	1
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	1	1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	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>NEG</b>	NEG	NEG

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	2	2
Boron	ppm	ASTM D5185(m)	328	<b>291</b>	254	207
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	1
Magnesium	ppm	ASTM D5185(m)	1	<b>2</b>	<1	2
Calcium	ppm	ASTM D5185(m)	7	<b>12</b>	10	10
Phosphorus	ppm	ASTM D5185(m)	1145	<b>1292</b>	1398	1179
Zinc	ppm	ASTM D5185(m)	3	<b>26</b>	70	116
Sulfur	ppm	ASTM D5185(m)	17909	<b>20401</b>	21764	19404
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	<b>104</b>	105	129



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0289638  
**Lab Number** : 02638608  
**Unique Number** : 5787770  
**Test Package** : MOB 1  
**Received** : 29 May 2024  
**Tested** : 29 May 2024  
**Diagnosed** : 29 May 2024 - Wes Davis

**HIGGS & HIGGS**  
 RR # 4  
 ST THOMAS, ON  
 CA N5P 3S8  
 Contact: Bernie Higgs

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.

T: (519)631-4095  
 F: (519)631-2745