



# LIEBHERR

## OIL ANALYSIS REPORT

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



Machine Id  
**LIEBHERR HS895 188244**

Component  
**Boom Winch**

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

### 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>LH0289540</b>	LH0276119	LH0266041
Sample Date		Client Info		<b>10 May 2024</b>	05 Sep 2023	06 Jun 2023
Machine Age	hrs	Client Info		<b>21278</b>	19868	15269
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>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>150	<b>14</b>	19	134
Chromium	ppm	ASTM D5185(m)	>10	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	0	<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	2
Lead	ppm	ASTM D5185(m)	>15	<b>0</b>	1	<1
Copper	ppm	ASTM D5185(m)	>80	<b>1</b>	<1	3
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>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

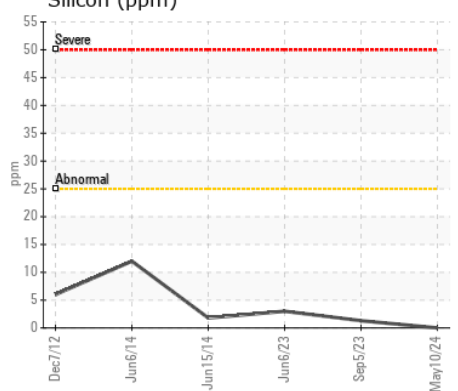
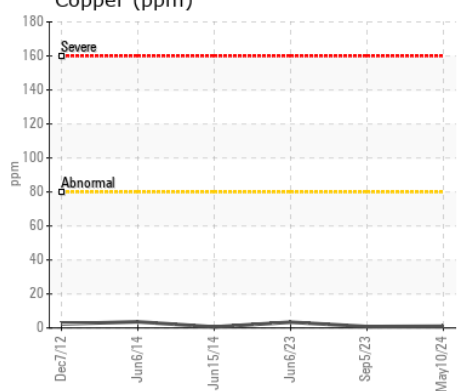
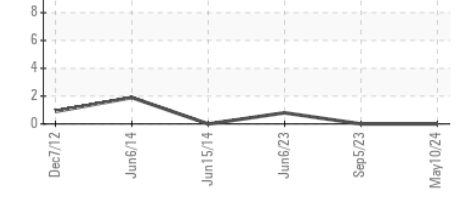
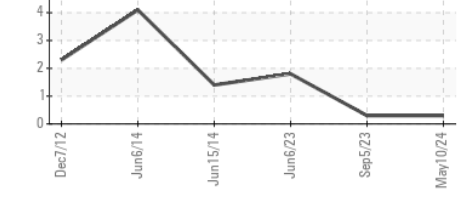
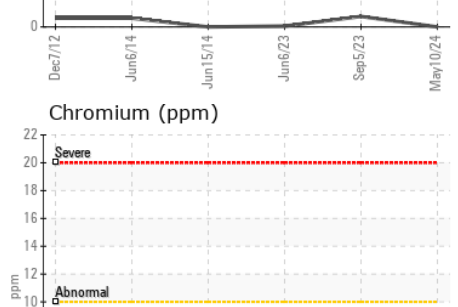
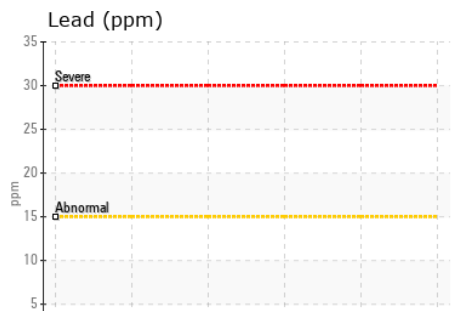
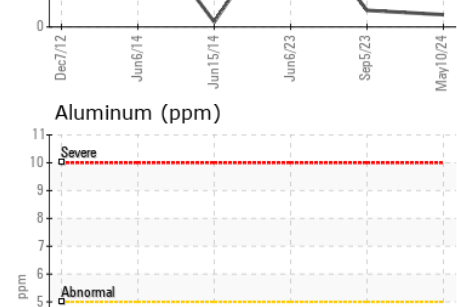
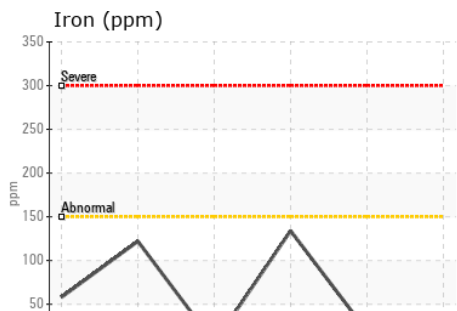
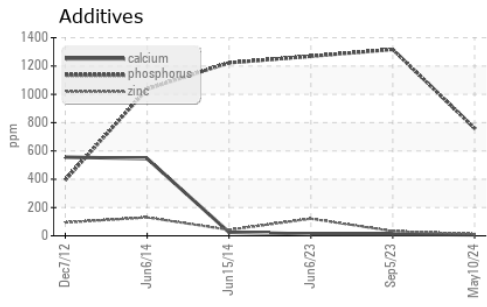
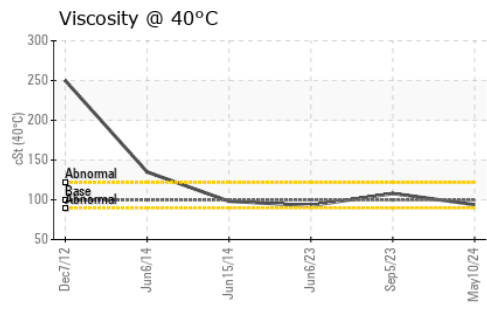
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>0</b>	1	3
Potassium	ppm	ASTM D5185(m)	>20	<b>24</b>	<1	2
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>	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	VLITE
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

Additive levels indicate the addition of a different brand, or type of oil.  
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>14</b>	1	1
Boron	ppm	ASTM D5185(m)	328	<b>47</b>	283	117
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	2
Magnesium	ppm	ASTM D5185(m)	1	<b>2</b>	1	2
Calcium	ppm	ASTM D5185(m)	7	<b>7</b>	11	13
Phosphorus	ppm	ASTM D5185(m)	1145	<b>760</b>	1317	1269
Zinc	ppm	ASTM D5185(m)	3	<b>12</b>	33	121
Sulfur	ppm	ASTM D5185(m)	17909	<b>19154</b>	20907	20702
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	<b>93.9</b>	108	92.7



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : LH0289540  
**Lab Number** : 02644203  
**Unique Number** : 5801742  
**Test Package** : MOB 1  
**Received** : 26 Jun 2024  
**Tested** : 26 Jun 2024  
**Diagnosed** : 26 Jun 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.

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