# LIEBHERR

## **CONSTRUCTION EQUIPMENT**

### LIEBHERR HS895HD 188227 - Boom Winch

Sample No: LH0286568

Oil Type: PETRO CANADA TRAXON 75W90 SYNTHETIC

5					
SAMPLE INFORMATION					
Sample Number	LH0286568	LH0274765	LH0261279	LH0247391	
Sample Date	01 Mar 2024	13 Oct 2023	04 May 2023	29 Nov 2022	
Machine Hours	26121	25204	24070	23243	
Oil Hours	0	0	0	0	
Oil Changed	N/A	N/A	Changed	Changed	
Sample Status	ABNORMAL	ABNORMAL	NORMAL	ABNORMAL	
OIL CONDITION					
Visc @ 40°C cSt	98.0	O 103	O 102	O 100	

CONTAMINATION						
Water	%	<b>0.306</b>	0.310	NEG	0.258	
Silicon	ppm	<b>2</b>	<b>3</b>	O 2	<b>4</b>	
Sodium	ppm	<b>1</b>	O 2	<b>1</b>	<b>3</b>	
Potassium	ppm	<b>2</b>	O <1	O <1	0 1	

WEA	R META	LS				
Iron	ppm	<b>39</b>	O 42	<b>3</b> 4	<b>9</b> 8	
Copper	ppm	<b>5</b>	<b>4</b>	<b>3</b>	<b>4</b>	
Lead	ppm	<b>()</b> <1	O <1	O <1	<1	
Tin	ppm	0	0	0	0	
Aluminum	ppm	<b></b> <1	O <1	O <1	<1	
Chromium	ppm	<b>○</b> <1	O <1	O 0	<1	
Molybdenum	ppm	<b>0</b>	<b>0</b>	O <1	O 0	
Nickel	ppm	<b>O</b> <1	O <1	O <1	<1	
Titanium	ppm	0	0	0	0	
Silver	ppm	0	<1	0	<1	
Manganese	ppm	<b>0</b>	<b>O</b> 0	O <1	O 1	
Vanadium	ppm	0	0	0	0	

vanadium ppm 0	0	0	0			
ADDITIVES						
Calcium ppm 010	O 9	O 7	O 6			
Magnesium ppm 3	<b>3</b>	<b>3</b>	<b>3</b>			
Zinc ppm 040	O 53	<b>47</b>	○ 80			
Phosphorus ppm 995	O 1178	O 1333	O 1277			
Barium ppm O<1	O <1	O 0	O			
Boron ppm 0 117	O 198	○ 257	<b>169</b>			



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

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#### Diagnosis

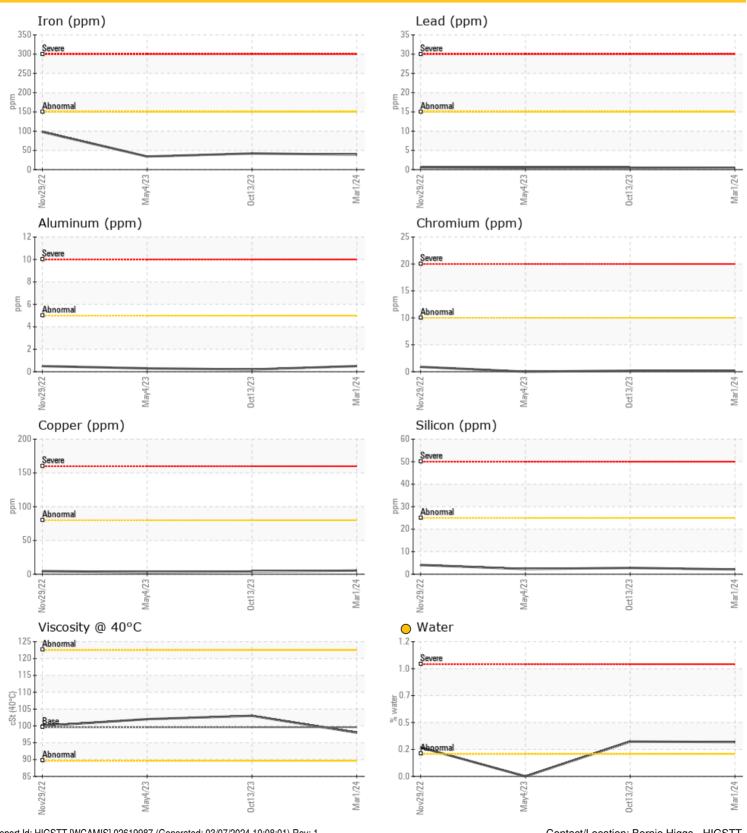
We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate concentration of water present in the oil. The oil is no longer serviceable due to the presence of contaminants.

Depot:HIGSTTUnique No:5737097Signed:Kevin MarsonReport Date:07 Mar 2024





#### **GRAPHS**



Report Id: HIGSTT [WCAMIS] 02619987 (Generated: 03/07/2024 10:08:01) Rev: 1

Contact/Location: Bernie Higgs - HIGSTT