



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL



Machine Id
LIEBHERR HS855 184844
Component
1 Winch
Fluid
GEAR OIL SAE 75W90 (35 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. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL SAE 75W90. Please confirm.

WEAR

All component wear rates are normal.

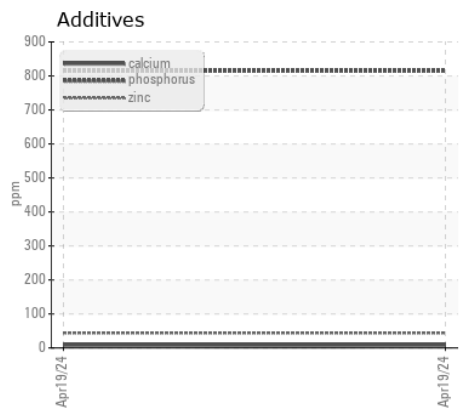
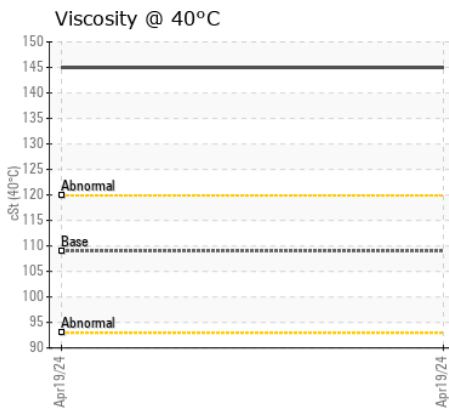
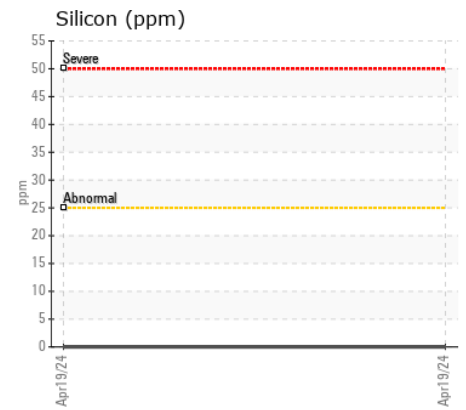
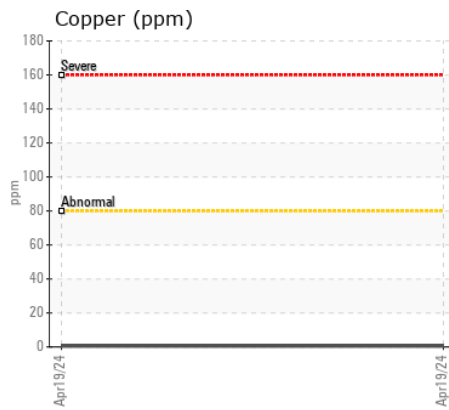
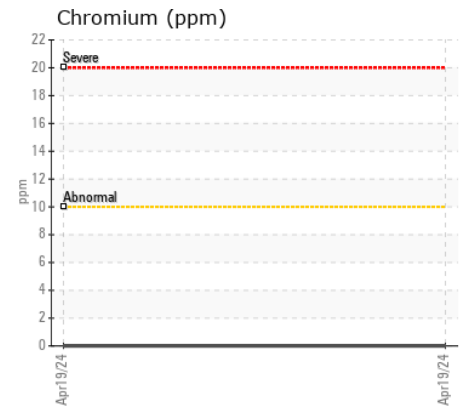
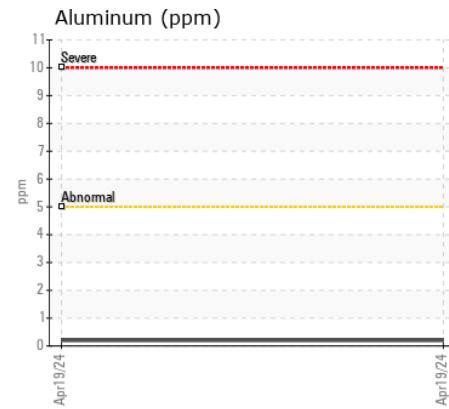
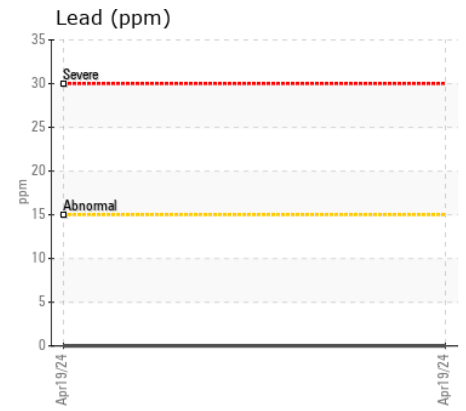
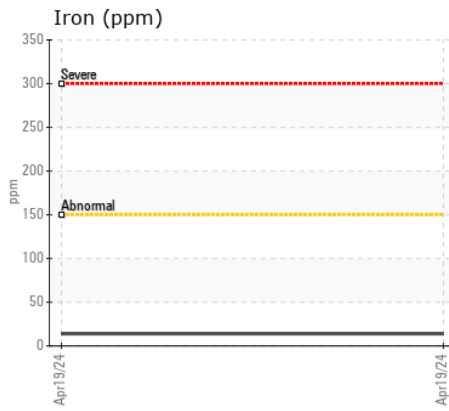
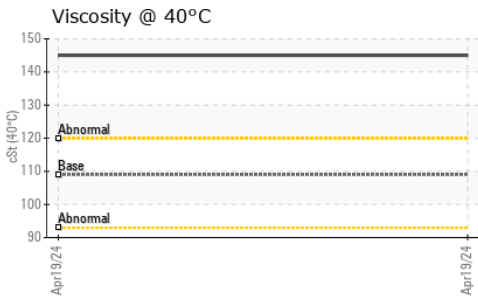
CONTAMINATION

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

FLUID CONDITION

The white residue present in the sample is oil additive precipitate. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0222401	---	---
Sample Date		Client Info		19 Apr 2024	---	---
Machine Age	hrs	Client Info		12143	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Chngd	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---
<hr/>						
Iron	ppm	ASTM D5185(m)	>150	14	---	---
Chromium	ppm	ASTM D5185(m)	>10	0	---	---
Nickel	ppm	ASTM D5185(m)	>10	0	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)		0	---	---
Aluminum	ppm	ASTM D5185(m)	>5	<1	---	---
Lead	ppm	ASTM D5185(m)	>15	0	---	---
Copper	ppm	ASTM D5185(m)	>80	<1	---	---
Tin	ppm	ASTM D5185(m)		0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
<hr/>						
Silicon	ppm	ASTM D5185(m)	>25	0	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Water		WC Method	>0.2	NEG	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	▲ LAYRD	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	▲ .5%	---	---
<hr/>						
Sodium	ppm	ASTM D5185(m)		<1	---	---
Boron	ppm	ASTM D5185(m)	400	32	---	---
Barium	ppm	ASTM D5185(m)	200	0	---	---
Molybdenum	ppm	ASTM D5185(m)	12	0	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)	12	<1	---	---
Calcium	ppm	ASTM D5185(m)	150	9	---	---
Phosphorus	ppm	ASTM D5185(m)	1650	815	---	---
Zinc	ppm	ASTM D5185(m)	125	44	---	---
Sulfur	ppm	ASTM D5185(m)	22500	21336	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	109	145	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0222401 **Received** : 25 Apr 2024
Lab Number : 02631395 **Tested** : 25 Apr 2024
Unique Number : 5772548 **Diagnosed** : 25 Apr 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: Bottom)

MCNALLY CORPORATION
 1855 BARTON STREET EAST
 HAMILTON, ON
 CA L8H 7C8
 Contact: BILL JONES

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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