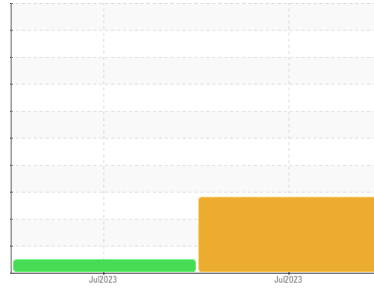


Machine Id  
**WNMU0101LM0002186**  
Component  
**Hydraulic System**  
Fluid  
**FUTERRA HF 46 (--- GAL)**



**DIAGNOSIS**

**Recommendation**  
We recommend an early resample to monitor this condition. The fluid was specified as (ONE-OFFS) FUTERRA HF 46, however, a fluid match indicates that this fluid is ISO 46 AW Hydraulic Oil. Please confirm the oil type and grade on your next sample. NOTE: The current sample results do not match this units historical trend, indicating the sample may not be from this component/unit. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MOB 2 test kits, this testkit includes Particle Count to determine the ISO cleanliness of the fluid.

**Wear**  
Light concentration of visible metal present. All other component wear rates are normal.

**Contamination**  
There is no indication of any contamination in the component(unconfirmed).

**Fluid Condition**  
The viscosity of the oil is higher than normal, possibly indicating the addition of a heavier grade of oil. This plus the additive levels indicates that this is not the same brand, or type of oil as reported.

**SAMPLE INFORMATION**

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>PC0073332</b>	PC0073328	---
Sample Date	Client Info	<b>20 Jul 2023</b>	19 Jul 2023	---
Machine Age	hrs	<b>1</b>	1	---
Oil Age	hrs	<b>0</b>	0	---
Oil Changed	Client Info	<b>N/A</b>	N/A	---
Sample Status		<b>ABNORMAL</b>	NORMAL	---

**WEAR METALS**

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185(m) >20	<b>2</b>	<1	---
Chromium ppm	ASTM D5185(m) >20	<b>0</b>	0	---
Nickel ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	---
Titanium ppm	ASTM D5185(m)	<b>0</b>	0	---
Silver ppm	ASTM D5185(m)	<b>0</b>	0	---
Aluminum ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	---
Lead ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	---
Copper ppm	ASTM D5185(m) >20	<b>2</b>	<1	---
Tin ppm	ASTM D5185(m) >20	<b>0</b>	0	---
Antimony ppm	ASTM D5185(m)	<b>0</b>	0	---
Vanadium ppm	ASTM D5185(m)	<b>0</b>	0	---
Beryllium ppm	ASTM D5185(m)	<b>0</b>	0	---
Cadmium ppm	ASTM D5185(m)	<b>0</b>	0	---

**ADDITIVES**

method	limit/base	current	history1	history2
Boron ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	---
Barium ppm	ASTM D5185(m)	<b>&lt;1</b>	0	---
Molybdenum ppm	ASTM D5185(m)	<b>0</b>	0	---
Manganese ppm	ASTM D5185(m)	<b>1</b>	0	---
Magnesium ppm	ASTM D5185(m)	<b>2</b>	0	---
Calcium ppm	ASTM D5185(m)	<b>▲ 61</b>	2	---
Phosphorus ppm	ASTM D5185(m)	<b>350</b>	442	---
Zinc ppm	ASTM D5185(m)	<b>▲ 410</b>	8	---
Sulfur ppm	ASTM D5185(m)	<b>854</b>	735	---
Lithium ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	---

**CONTAMINANTS**

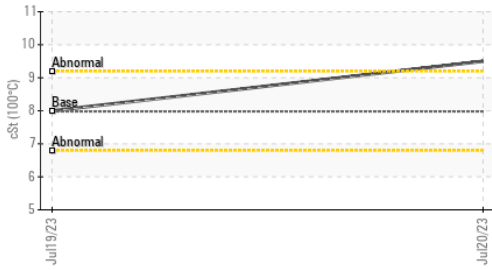
method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1	---
Sodium ppm	ASTM D5185(m)	<b>&lt;1</b>	0	---
Potassium ppm	ASTM D5185(m) >20	<b>0</b>	0	---

**VISUAL**

method	limit/base	current	history1	history2
White Metal scalar	Visual* NONE	<b>▲ VLITE</b>	NONE	---
Yellow Metal scalar	Visual* NONE	<b>NONE</b>	NONE	---
Precipitate scalar	Visual* NONE	<b>NONE</b>	NONE	---
Silt scalar	Visual* NONE	<b>NONE</b>	NONE	---
Debris scalar	Visual* NONE	<b>NONE</b>	NONE	---
Sand/Dirt scalar	Visual* NONE	<b>NONE</b>	NONE	---
Appearance scalar	Visual* NORML	<b>NORML</b>	NORML	---
Odor scalar	Visual* NORML	<b>NORML</b>	NORML	---
Emulsified Water scalar	Visual* >0.05	<b>NEG</b>	NEG	---
Free Water scalar	Visual*	<b>NEG</b>	NEG	---

# OIL ANALYSIS REPORT

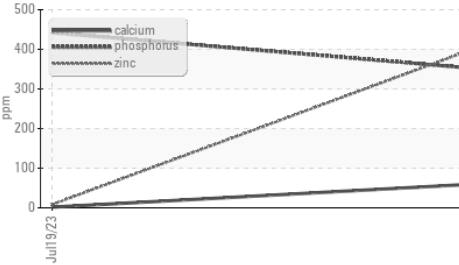
▲ Viscosity @ 100°C



▲ Viscosity @ 40°C



▲ Additives



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46	▲ 56.4	46.4	---
Visc @ 100°C	cSt	ASTM D7279(m)	7.98	▲ 9.5	8	---
Viscosity Index (VI)	Scale	ASTM D2270*	140	152	144	---

SAMPLE IMAGES		method	limit/base	current	history1	history2
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Color			no image
Bottom			no image
PrtFilter		no image	no image

## GRAPHS

Iron (ppm)



Lead (ppm)



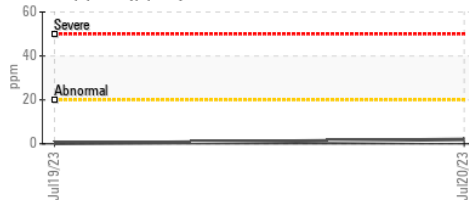
Aluminum (ppm)



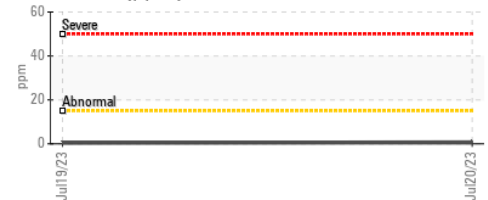
Chromium (ppm)



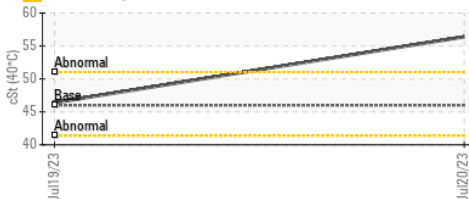
Copper (ppm)



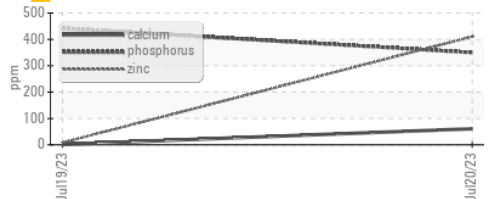
Silicon (ppm)



▲ Viscosity @ 40°C



▲ Additives



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0073332 **Received** : 28 Jul 2023  
**Lab Number** : 02572993 **Diagnosed** : 02 Aug 2023  
**Unique Number** : 5618044 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: Bottom, BottomAnalysis, FilterPatch, KV100, VI )

**J. RENE LAFOND INC**  
 3203 CHEM. CHARLES - LEONARD  
 MIRABEL, QC  
 CA J7N 2Y7  
 Contact: Service Manager  
 epoirier@jrenelafond.com

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.