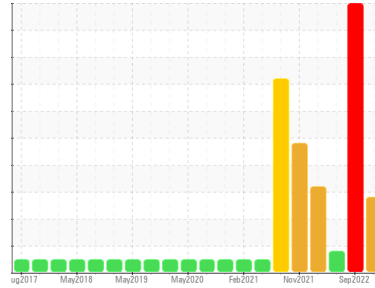




# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Area  
**97**  
Machine Id  
**[97] A97 Fan 901**  
Component  
**Center Gearbox**  
Fluid  
**GEAR LIFE 150 (5 GAL)**

## DIAGNOSIS

### Recommendation

We advise that you follow the water drain-off procedure for this component. We recommend an early resample to monitor this condition. ( Customer Sample Comment: This cooling tower gear box failed and was only 2-3 months old. Unable to obtain full sample amount at this time. When the gearbox is pulled I will get another sample. Some water is present along with ferrous metal. Will be doing a RCFA on the gearbox )

### Wear

All component wear rates are normal.

### Contamination

There is a light concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>HPL0001852</b>	HPL0001167	HPL0000172
Sample Date	Client Info		<b>03 Mar 2023</b>	01 Sep 2022	16 May 2022
Machine Age	hrs	Client Info	<b>720</b>	0	0
Oil Age	hrs	Client Info	<b>720</b>	1440	2660
Oil Changed	Client Info		<b>Not Changed</b>	Changed	Not Changed
Sample Status			<b>ABNORMAL</b>	SEVERE	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	<b>117</b>	583	449
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	4	4
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >25	<b>2</b>	10	17
Lead	ppm	ASTM D5185m >50	<b>&lt;1</b>	5	7
Copper	ppm	ASTM D5185m >200	<b>0</b>	2	2
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185m >5	<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>&lt;1</b>	3	2
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185m	<b>2</b>	6	5
Magnesium	ppm	ASTM D5185m	<b>5</b>	17	45
Calcium	ppm	ASTM D5185m	<b>27</b>	56	96
Phosphorus	ppm	ASTM D5185m	<b>174</b>	182	154
Zinc	ppm	ASTM D5185m	<b>16</b>	2	0
Sulfur	ppm	ASTM D5185m	<b>23096</b>	19677	17938

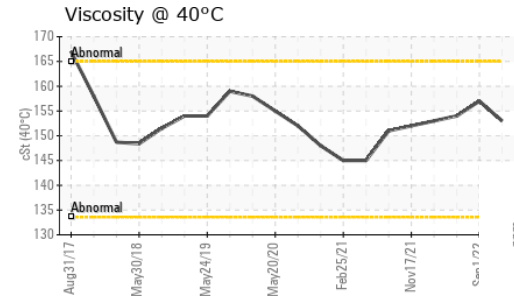
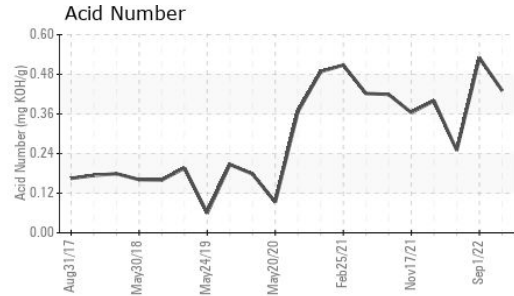
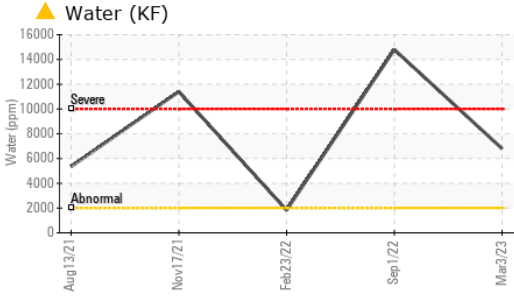
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>5</b>	26	44
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	2	13
Potassium	ppm	ASTM D5185m >20	<b>2</b>	4	3
Water	%	ASTM D6304 >0.2	<b>0.680</b>	1.48	---
ppm Water	ppm	ASTM D6304 >2000	<b>6800</b>	14800	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.431</b>	0.53	0.25

# OIL ANALYSIS REPORT



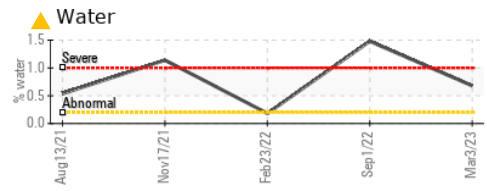
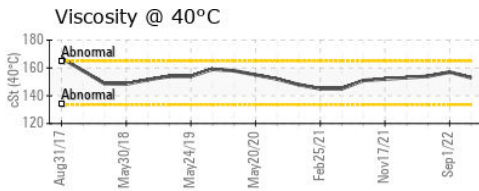
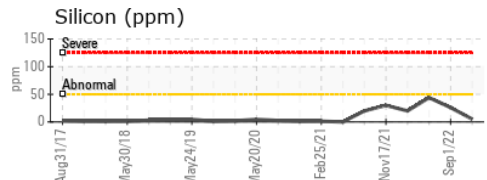
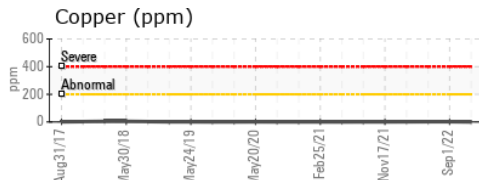
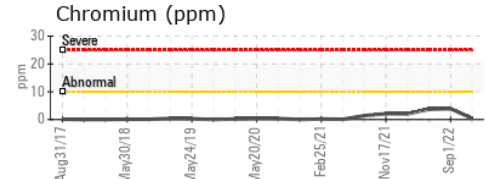
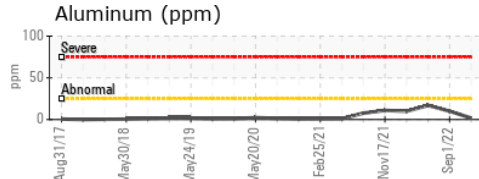
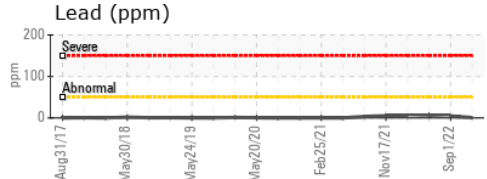
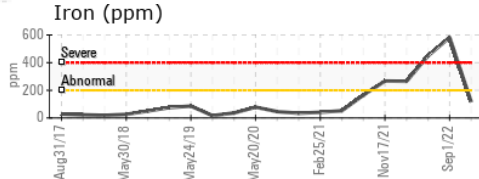
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	MODER	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	HAZY	MILKY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	0.2%	0.2%
Free Water	scalar	*Visual	NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	153	157	154

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

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : HPL0001852 **Recieved** : 07 Mar 2023  
**Lab Number** : 05785149 **Diagnosed** : 08 Mar 2023  
**Unique Number** : 10364819 **Diagnostician** : Angela Borella  
**Test Package** : MOB 2 ( Additional Tests: KF )

**KENSING**  
 2525 S KENSINGTON RD  
 KANKAKEE, IL  
 US 60901  
 Contact: TIM HUBERT  
 timothy.hubert@kensingsolutions.com  
 T: (815)939-8918  
 F: x:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)