



# OIL ANALYSIS REPORT

Sample Rating Trend

**WEAR**



Area  
**[186795-N2STV4W]**  
Machine Id  
**SHEAR 997386**

Component  
**Hydraulic System**  
Fluid

**AW HYDRAULIC OIL ISO 68 (30 GAL)**



## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

The copper level is abnormal. All other component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

### Fluid Condition

Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>PH05930848</b>	---	---
Sample Date	Client Info	<b>09 Feb 2023</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---
Oil Age	hrs	Client Info	<b>0</b>	---
Oil Changed	Client Info	<b>N/A</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method	<b>&gt;0.05</b>	<b>NEG</b>	---

## WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Lead	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>20	<b>▲ 39</b>	---	---
Tin	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	5	<b>0</b>	---	---
Barium	ppm	ASTM D5185m	5	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	5	<b>0</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	25	<b>2</b>	---	---
Calcium	ppm	ASTM D5185m	200	<b>93</b>	---	---
Phosphorus	ppm	ASTM D5185m	300	<b>321</b>	---	---
Zinc	ppm	ASTM D5185m	370	<b>381</b>	---	---
Sulfur	ppm	ASTM D5185m	2500	<b>6480</b>	---	---

## CONTAMINANTS

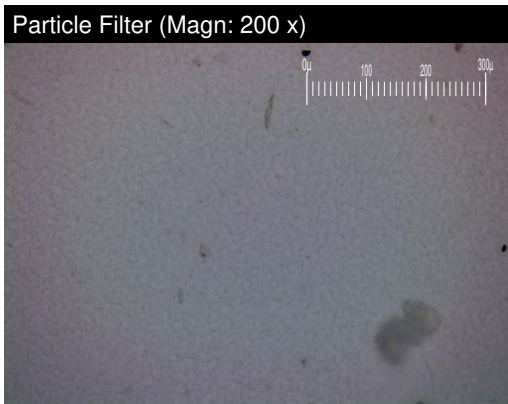
method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	---	---
Sodium	ppm	ASTM D5185m		<b>2</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	---	---

## FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>10000	<b>499</b>	---	---
Particles >6µm	ASTM D7647	>2500	<b>119</b>	---	---
Particles >14µm	ASTM D7647	>320	<b>14</b>	---	---
Particles >21µm	ASTM D7647	>80	<b>3</b>	---	---
Particles >38µm	ASTM D7647	>20	<b>0</b>	---	---
Particles >71µm	ASTM D7647	>4	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>16/14/11</b>	---	---

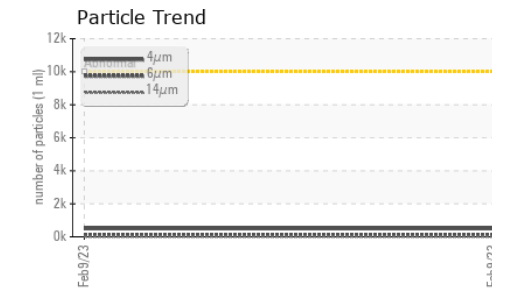
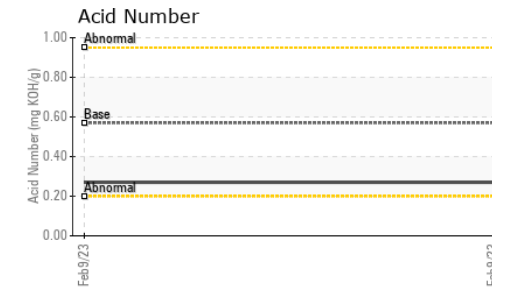
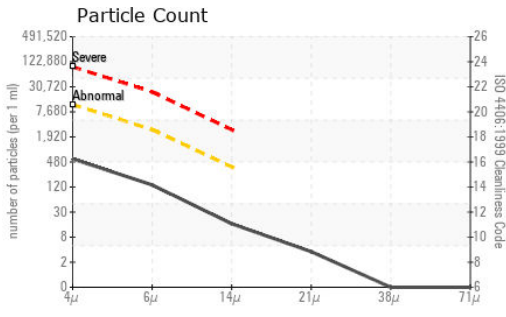
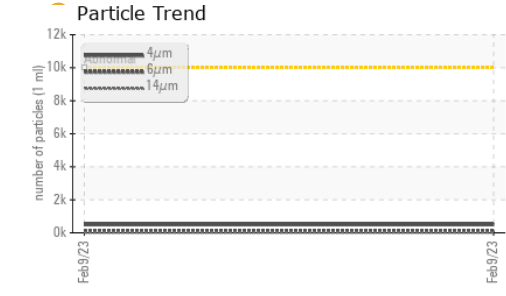
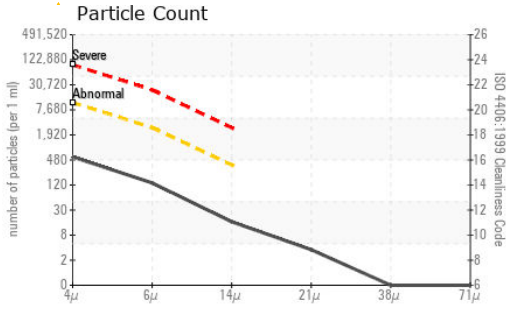
## FLUID DEGRADATION

method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.27</b>	---	---





# OIL ANALYSIS REPORT



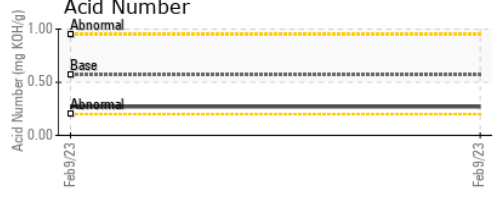
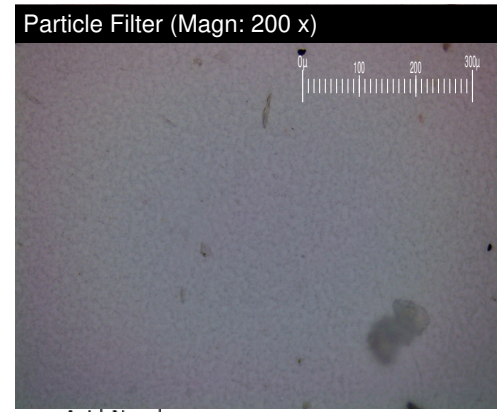
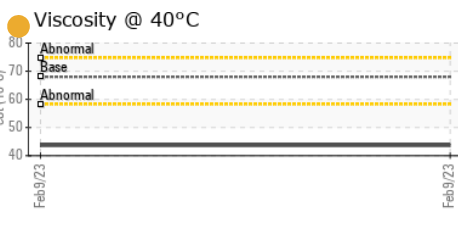
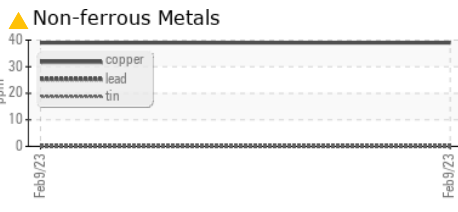
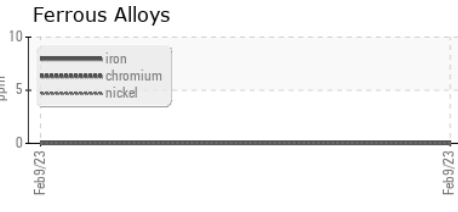
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 68	<b>43.7</b>	---	---

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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PH05930848 **Received** : 22 Aug 2023  
**Lab Number** : **05930848** **Tested** : 30 Aug 2023  
**Unique Number** : 10616119 **Diagnosed** : 30 Aug 2023 - Doug Bogart  
**Test Package** : PLANT ( Additional Tests: PrtFilter )

**GULFSTREAM AEROSPACE CORP**  
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 SAVANNAH, GA  
 US 31408  
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 T: (912)965-8814  
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Certificate L2367  
 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)