



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id  
**85249**

Component  
**Hydraulic System**

Fluid  
**AW HYDRAULIC OIL ISO 46 (50 GAL)**

## DIAGNOSIS

### Recommendation

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

### Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>WC0768895</b>	---	---
Sample Date	Client Info	<b>21 Mar 2024</b>	---	---
Machine Age	yrs Client Info	<b>0</b>	---	---
Oil Age	yrs Client Info	<b>1</b>	---	---
Oil Changed	Client Info	<b>Changed</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## CONTAMINATION

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

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >20	<b>3</b>	---	---
Chromium	ppm ASTM D5185m >20	<b>0</b>	---	---
Nickel	ppm ASTM D5185m >20	<b>0</b>	---	---
Titanium	ppm ASTM D5185m	<b>0</b>	---	---
Silver	ppm ASTM D5185m	<b>0</b>	---	---
Aluminum	ppm ASTM D5185m >20	<b>2</b>	---	---
Lead	ppm ASTM D5185m >20	<b>0</b>	---	---
Copper	ppm ASTM D5185m >20	<b>0</b>	---	---
Tin	ppm ASTM D5185m >20	<b>0</b>	---	---
Vanadium	ppm ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 5	<b>1</b>	---	---
Barium	ppm ASTM D5185m 5	<b>0</b>	---	---
Molybdenum	ppm ASTM D5185m 5	<b>3</b>	---	---
Manganese	ppm ASTM D5185m	<b>0</b>	---	---
Magnesium	ppm ASTM D5185m 25	<b>4</b>	---	---
Calcium	ppm ASTM D5185m 200	<b>71</b>	---	---
Phosphorus	ppm ASTM D5185m 300	<b>350</b>	---	---
Zinc	ppm ASTM D5185m 370	<b>456</b>	---	---
Sulfur	ppm ASTM D5185m 2500	<b>2791</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >15	<b>6</b>	---	---
Sodium	ppm ASTM D5185m	<b>1</b>	---	---
Potassium	ppm ASTM D5185m >20	<b>0</b>	---	---

## FLUID CLEANLINESS

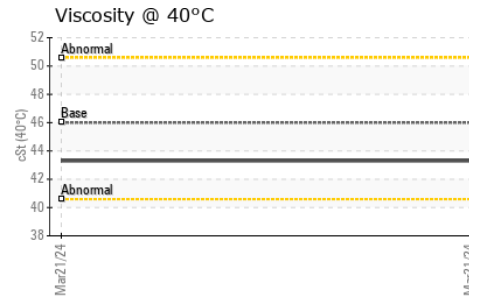
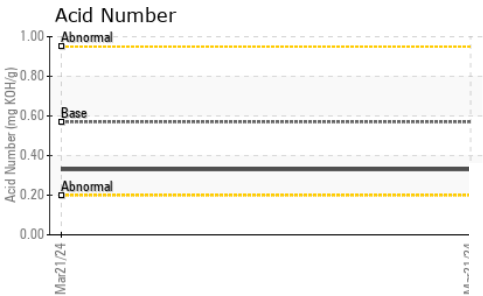
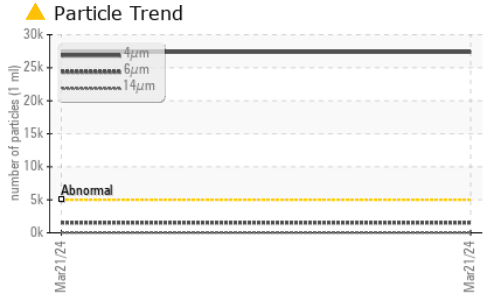
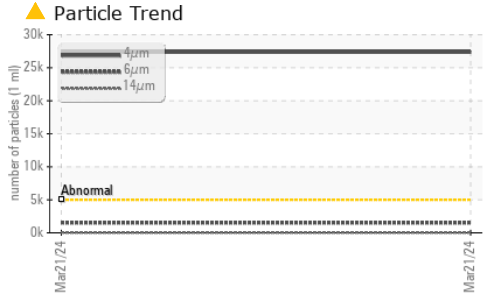
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>▲ 27362</b>	---	---
Particles >6µm	ASTM D7647 >1300	<b>● 1531</b>	---	---
Particles >14µm	ASTM D7647 >160	<b>34</b>	---	---
Particles >21µm	ASTM D7647 >40	<b>9</b>	---	---
Particles >38µm	ASTM D7647 >10	<b>0</b>	---	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>▲ 22/18/12</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 0.57	<b>0.33</b>	---	---



# OIL ANALYSIS REPORT



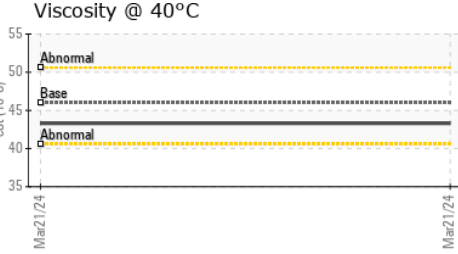
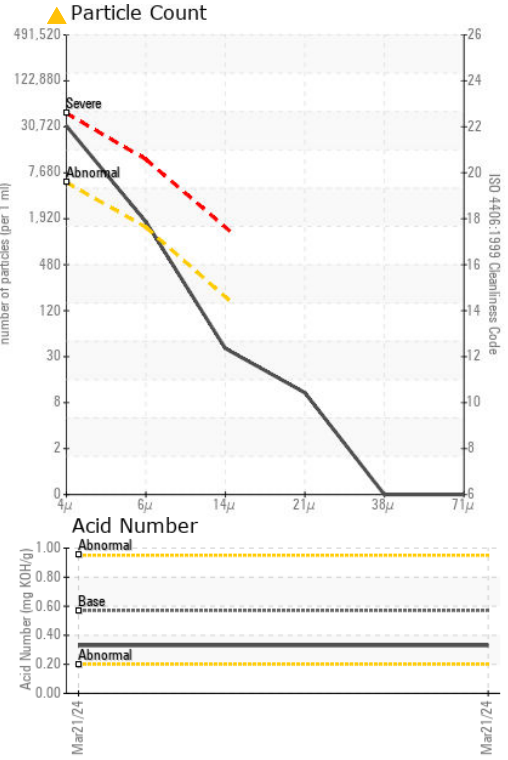
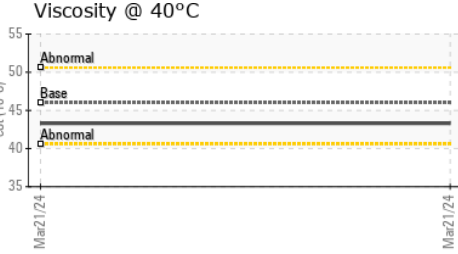
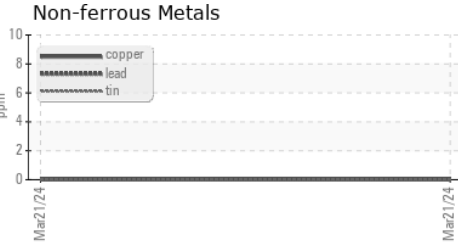
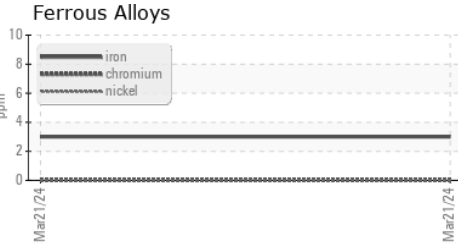
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
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	46	<b>43.3</b>	---	---

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.** : WC0768895 **Received** : 27 Mar 2024  
**Lab Number** : **06130583** **Tested** : 28 Mar 2024  
**Unique Number** : 10950048 **Diagnosed** : 28 Mar 2024 - Wes Davis  
**Test Package** : IND 2

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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)