

# PROBLEM SUMMARY

Sample Rating Trend



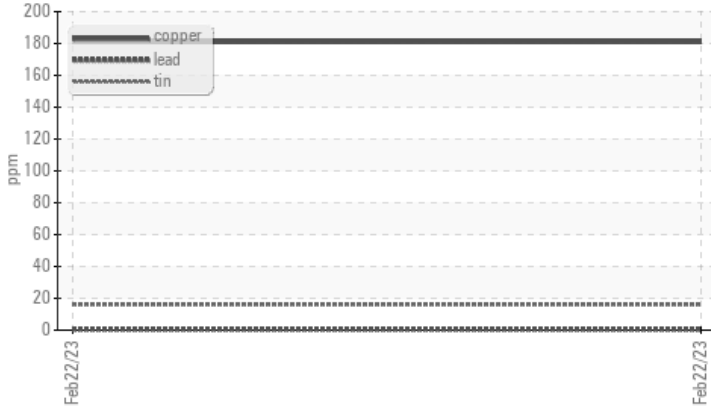
**WEAR**



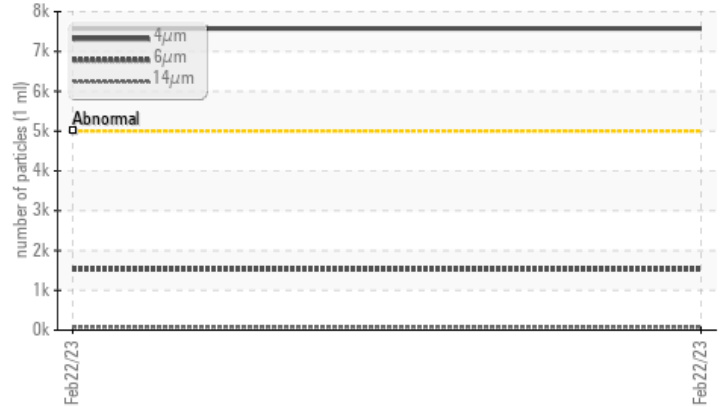
Machine Id  
**FRS AFFAIRS**  
Component  
**Hydraulic System**  
Fluid  
**NAPA AW-46 (70 GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Non-ferrous Metals



### ▲ Particle Trend



## RECOMMENDATION

Resample at the next service interval to monitor.  
Due to an abnormal test result it is recommended to contact Stauff Corp at (201)-444-7800 for help resolving the issue.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	---	---
Copper	ppm	ASTM D5185m	>20	▲ <b>181</b>	---	---
Particles >4µm		ASTM D7647	>5000	▲ <b>7574</b>	---	---
Particles >6µm		ASTM D7647	>1300	▲ <b>1524</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ <b>20/18/13</b>	---	---

Customer Id: STAUFFUS  
Sample No.: ST44393  
Lab Number: 05810962  
Test Package: IND 2



To manage this report scan the QR code

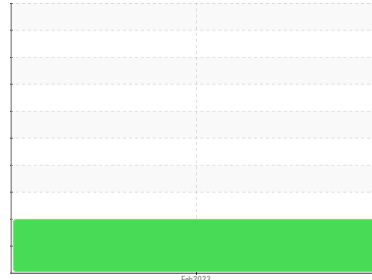
To discuss the diagnosis or test data:  
Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Contact Required	---	---	?	Due to an abnormal test result it is recommended to contact Stauff Corp at (201)-444-7800 for help resolving the issue.

## HISTORICAL DIAGNOSIS



Machine Id  
**FRS AFFAIRS**  
 Component  
**Hydraulic System**  
 Fluid  
**NAPA AW-46 (70 GAL)**

**DIAGNOSIS**

**▲ Recommendation**  
 Resample at the next service interval to monitor. Due to an abnormal test result it is recommended to contact Stauff Corp at (201)-444-7800 for help resolving the issue.

**▲ Wear**  
 The copper level is abnormal.

**▲ 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 condition of the oil is suitable for further service.

**SAMPLE INFORMATION**

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>ST44393</b>	---	---
Sample Date	Client Info		<b>22 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>	---	---

**WEAR METALS**

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>11</b>	---	---
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m >20	<b>3</b>	---	---
Titanium	ppm	ASTM D5185m	<b>0</b>	---	---
Silver	ppm	ASTM D5185m	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >20	<b>&lt;1</b>	---	---
Lead	ppm	ASTM D5185m >20	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m >20	<b>▲ 181</b>	---	---
Tin	ppm	ASTM D5185m >20	<b>16</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	<b>5</b>	---	---
Barium	ppm	ASTM D5185m	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	<b>1</b>	---	---
Manganese	ppm	ASTM D5185m	<b>1</b>	---	---
Magnesium	ppm	ASTM D5185m	<b>22</b>	---	---
Calcium	ppm	ASTM D5185m	<b>113</b>	---	---
Phosphorus	ppm	ASTM D5185m	<b>369</b>	---	---
Zinc	ppm	ASTM D5185m	<b>510</b>	---	---
Sulfur	ppm	ASTM D5185m	<b>1836</b>	---	---

**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>1</b>	---	---
Sodium	ppm	ASTM D5185m	<b>1</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	---	---
Water	%	ASTM D6304 >0.05	<b>0.014</b>	---	---
ppm Water	ppm	ASTM D6304 >500	<b>143.8</b>	---	---

**FLUID CLEANLINESS**

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>▲ 7574</b>	---	---
Particles >6µm	ASTM D7647	>1300	<b>▲ 1524</b>	---	---
Particles >14µm	ASTM D7647	>160	<b>76</b>	---	---
Particles >21µm	ASTM D7647	>40	<b>13</b>	---	---
Particles >38µm	ASTM D7647	>10	<b>1</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 20/18/13</b>	---	---

**FLUID DEGRADATION**

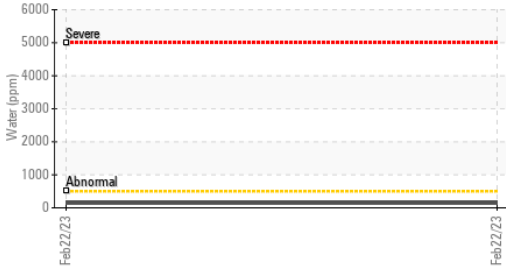
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.82</b>	---	---

# OIL ANALYSIS REPORT

**Particle Trend**



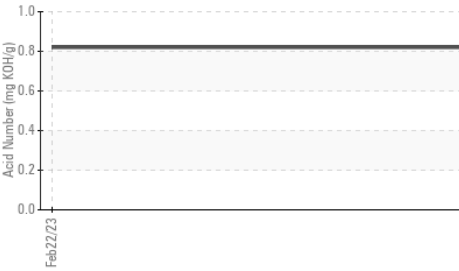
**Water (KF)**



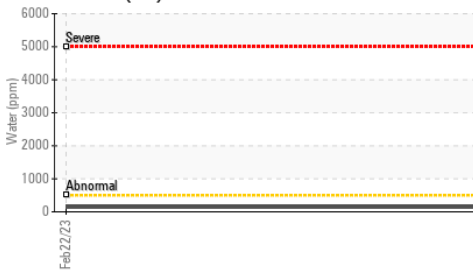
**Particle Trend**



**Acid Number**



**Water (KF)**



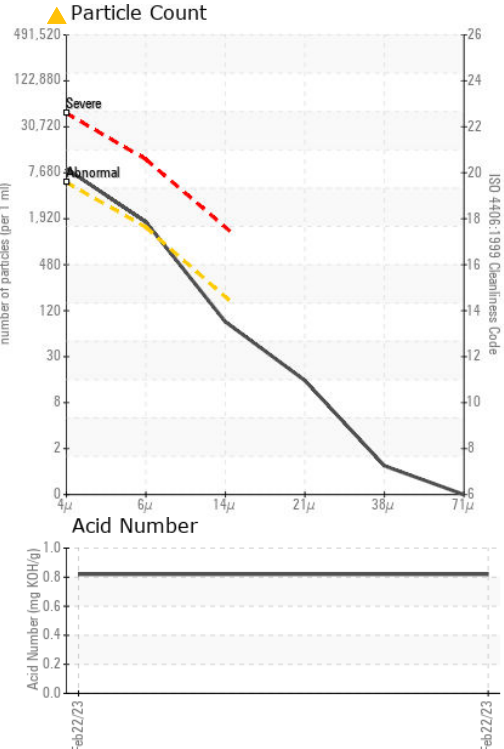
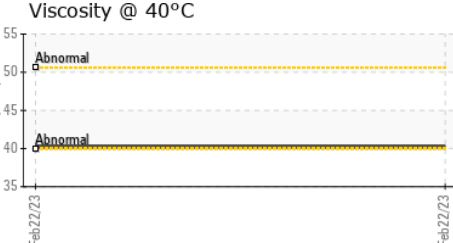
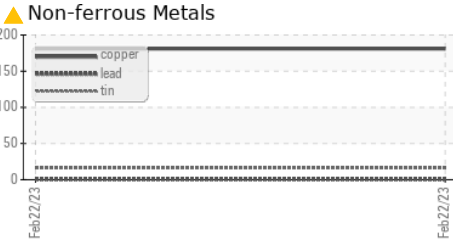
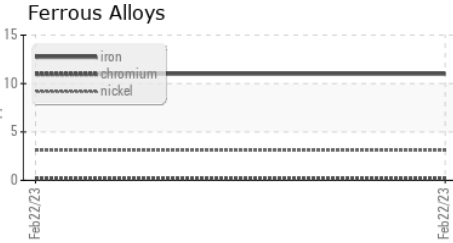
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	40.2	---	---

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.** : ST44393 **Received** : 04 Apr 2023  
**Lab Number** : 05810962 **Diagnosed** : 07 Apr 2023  
**Unique Number** : 10413754 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF )

**STAUFF FILTRATION TECHNOLOGY**  
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 US 48188  
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 cmacneil@stauffusa.com  
 T: (734)747-7300  
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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)