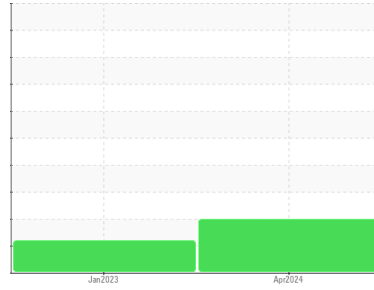


# OIL ANALYSIS REPORT

## Sample Rating Trend



**WEAR**



Machine Id

## GOODYEAR AKRON TEST 34

Component

Hydraulic System

Fluid

CONOCO MEGAFLOW AW 46 (--- GAL)

### DIAGNOSIS

#### Recommendation

We recommend an early resample to monitor this condition. Due to an abnormal test result it is recommended to contact Stauff Corp at (201)-444-7800 for help resolving the issue.

#### Wear

The iron level is abnormal.

#### Contamination

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

#### Fluid Condition

The AN level is acceptable for this fluid.

| SAMPLE INFORMATION |             | method      | limit/base | current            | history1    | history2 |
|--------------------|-------------|-------------|------------|--------------------|-------------|----------|
| Sample Number      | Client Info |             |            | <b>ST46165</b>     | ST44351     | ---      |
| Sample Date        | Client Info |             |            | <b>21 Apr 2024</b> | 02 Jan 2023 | ---      |
| Machine Age        | hrs         | Client Info |            | <b>0</b>           | 0           | ---      |
| Oil Age            | hrs         | Client Info |            | <b>0</b>           | 0           | ---      |
| Oil Changed        | Client Info |             |            | <b>N/A</b>         | N/A         | ---      |
| Sample Status      |             |             |            | <b>ABNORMAL</b>    | ATTENTION   | ---      |

| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >20        | <b>▲ 47</b>  | 1        | ---      |
| Chromium    | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | 0        | ---      |
| Nickel      | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | 0        | ---      |
| Titanium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | ---      |
| Silver      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | ---      |
| Aluminum    | ppm | ASTM D5185m | >20        | <b>2</b>     | 0        | ---      |
| Lead        | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | 0        | ---      |
| Copper      | ppm | ASTM D5185m | >20        | <b>15</b>    | 16       | ---      |
| Tin         | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | 0        | ---      |
| Vanadium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | ---      |
| Cadmium     | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | ---      |

| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | ---      |
| Barium     | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | ---      |
| Molybdenum | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | ---      |
| Manganese  | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | ---      |
| Magnesium  | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | ---      |
| Calcium    | ppm | ASTM D5185m |            | <b>15</b>    | 9        | ---      |
| Phosphorus | ppm | ASTM D5185m |            | <b>348</b>   | 285      | ---      |
| Zinc       | ppm | ASTM D5185m |            | <b>311</b>   | 241      | ---      |
| Sulfur     | ppm | ASTM D5185m |            | <b>844</b>   | 805      | ---      |

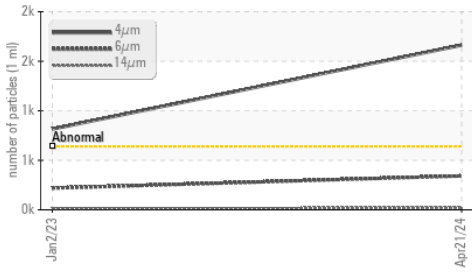
| CONTAMINANTS |     | method      | limit/base | current     | history1 | history2 |
|--------------|-----|-------------|------------|-------------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >15        | <b>4</b>    | <1       | ---      |
| Sodium       | ppm | ASTM D5185m |            | <b>1</b>    | 1        | ---      |
| Potassium    | ppm | ASTM D5185m | >20        | <b>1</b>    | 0        | ---      |
| Water        | %   | ASTM D6304  | >0.05      | <b>0.00</b> | 0.006    | ---      |
| ppm Water    | ppm | ASTM D6304  | >500       | <b>0</b>    | 63.2     | ---      |

| FLUID CLEANLINESS |  | method       | limit/base | current           | history1   | history2 |
|-------------------|--|--------------|------------|-------------------|------------|----------|
| Particles >4µm    |  | ASTM D7647   | >640       | <b>▲ 1663</b>     | ● 815      | ---      |
| Particles >6µm    |  | ASTM D7647   | >160       | <b>▲ 342</b>      | ● 219      | ---      |
| Particles >14µm   |  | ASTM D7647   | >20        | <b>20</b>         | 14         | ---      |
| Particles >21µm   |  | ASTM D7647   | >4         | <b>5</b>          | 3          | ---      |
| Particles >38µm   |  | ASTM D7647   | >3         | <b>0</b>          | 0          | ---      |
| Particles >71µm   |  | ASTM D7647   | >3         | <b>0</b>          | 0          | ---      |
| Oil Cleanliness   |  | ISO 4406 (c) | >16/14/11  | <b>▲ 18/16/11</b> | ● 17/15/11 | ---      |

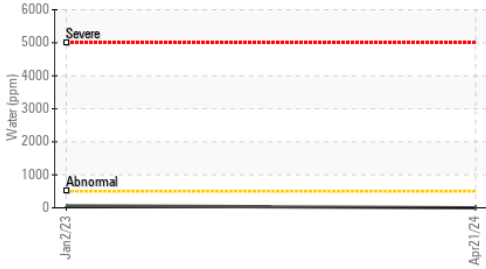
| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 | 0.38       | <b>0.31</b> | 0.27     | ---      |

# OIL ANALYSIS REPORT

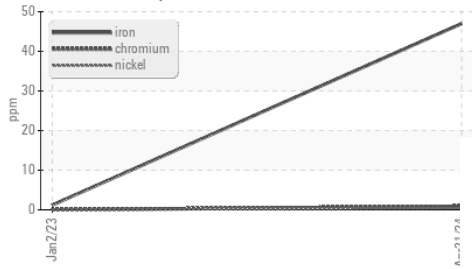
**Particle Trend**



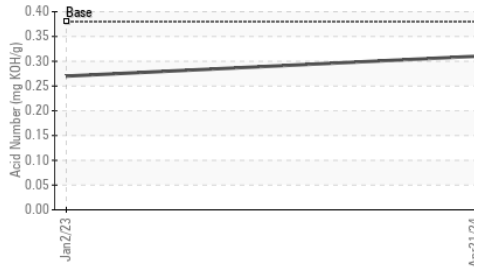
**Water (KF)**



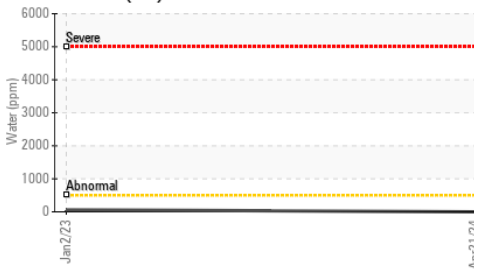
**Ferrous Alloys**



**Acid Number**



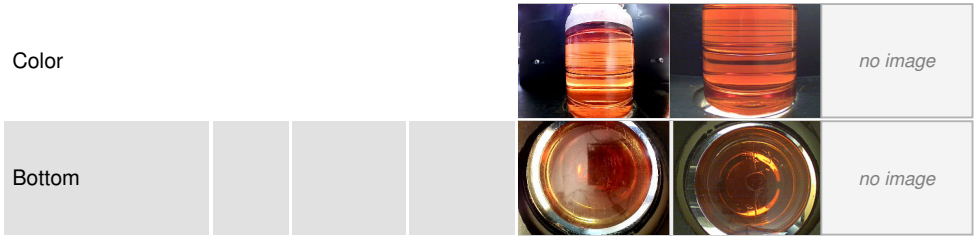
**Water (KF)**



| 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      | ---      |

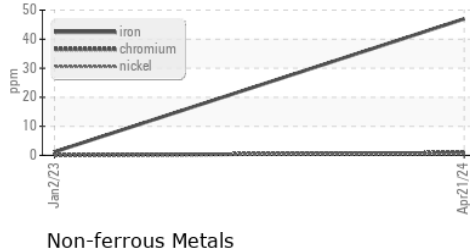
| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 46      | 45.0     | 44.5     |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|

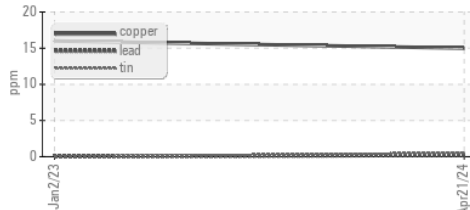


**GRAPHS**

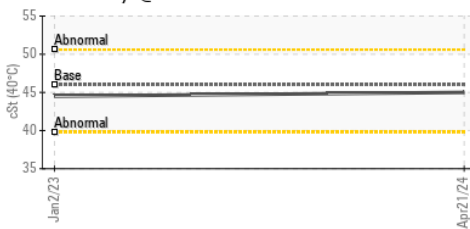
**Ferrous Alloys**



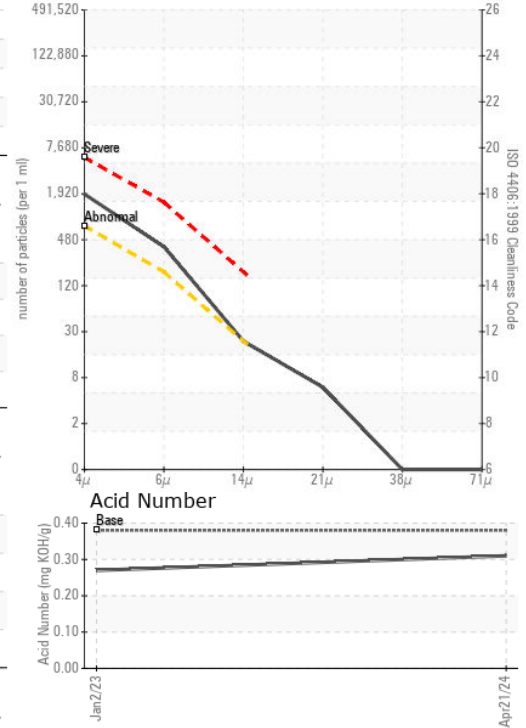
**Non-ferrous Metals**



**Viscosity @ 40°C**



**Particle Count**



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ST46165  
**Lab Number** : 06156005  
**Unique Number** : 10991428  
**Test Package** : IND 2 ( Additional Tests: KF )  
**Received** : 22 Apr 2024  
**Tested** : 23 Apr 2024  
**Diagnosed** : 24 Apr 2024 - Jonathan Hester

**FLUID POWER SOLUTIONS**  
 4400 Edgewyn Ave.  
 Hilliard, OH  
 US 43026  
 Contact: SCOTT ROGERS  
 srogers@fluid-power-solutions.com

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)

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