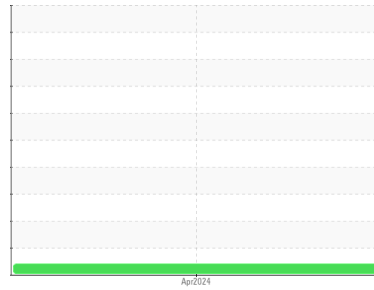




# OIL ANALYSIS REPORT

Area  
**KANSAS/44/EG - EXCAVATOR**  
 Machine Id  
**20.210L [KANSAS^44^EG - EXCAVATOR]**  
 Component  
**Hydraulic System**  
 Fluid  
**CAT HYDO (--- GAL)**

### Sample Rating Trend



VIS DEBRIS



### DIAGNOSIS

#### ▲ Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

#### Wear

All component wear rates are normal.

#### ▲ Contamination

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 suitable for further service.

### SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1 | history2 |
|---------------|-------------|-------------|--------------------|----------|----------|
| Sample Number | Client Info |             | <b>WC0918405</b>   | ---      | ---      |
| Sample Date   | Client Info |             | <b>01 Apr 2024</b> | ---      | ---      |
| Machine Age   | hrs         | Client Info | <b>9</b>           | ---      | ---      |
| Oil Age       | hrs         | Client Info | <b>9</b>           | ---      | ---      |
| Oil Changed   | Client Info |             | <b>Not Changed</b> | ---      | ---      |
| Sample Status |             |             | <b>ABNORMAL</b>    | ---      | ---      |

### CONTAMINATION

|       | method    | limit/base | current    | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >0.1       | <b>NEG</b> | ---      | ---      |

### WEAR METALS

|          | method | limit/base      | current      | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >20 | <b>&lt;1</b> | ---      | ---      |
| Chromium | ppm    | ASTM D5185m >10 | <b>0</b>     | ---      | ---      |
| Nickel   | ppm    | ASTM D5185m >10 | <b>0</b>     | ---      | ---      |
| Titanium | ppm    | ASTM D5185m     | <b>0</b>     | ---      | ---      |
| Silver   | ppm    | ASTM D5185m     | <b>0</b>     | ---      | ---      |
| Aluminum | ppm    | ASTM D5185m >10 | <b>0</b>     | ---      | ---      |
| Lead     | ppm    | ASTM D5185m >10 | <b>0</b>     | ---      | ---      |
| Copper   | ppm    | ASTM D5185m >75 | <b>1</b>     | ---      | ---      |
| Tin      | ppm    | ASTM D5185m >10 | <b>&lt;1</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      | <b>0</b>     | ---      | ---      |
| Barium     | ppm    | ASTM D5185m      | <b>0</b>     | ---      | ---      |
| Molybdenum | ppm    | ASTM D5185m      | <b>2</b>     | ---      | ---      |
| Manganese  | ppm    | ASTM D5185m      | <b>&lt;1</b> | ---      | ---      |
| Magnesium  | ppm    | ASTM D5185m      | <b>1</b>     | ---      | ---      |
| Calcium    | ppm    | ASTM D5185m      | <b>166</b>   | ---      | ---      |
| Phosphorus | ppm    | ASTM D5185m 1100 | <b>704</b>   | ---      | ---      |
| Zinc       | ppm    | ASTM D5185m 1210 | <b>882</b>   | ---      | ---      |
| Sulfur     | ppm    | ASTM D5185m      | <b>2104</b>  | ---      | ---      |

### CONTAMINANTS

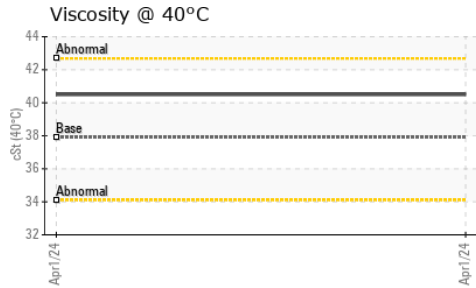
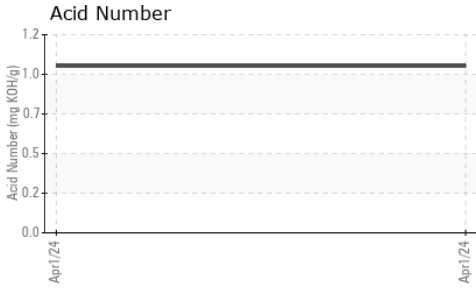
|           | method | limit/base      | current      | history1 | history2 |
|-----------|--------|-----------------|--------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >20 | <b>&lt;1</b> | ---      | ---      |
| Sodium    | ppm    | ASTM D5185m     | <b>2</b>     | ---      |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

### FLUID DEGRADATION

|                  | method   | limit/base | current     | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | <b>1.01</b> | ---      | ---      |





# OIL ANALYSIS REPORT



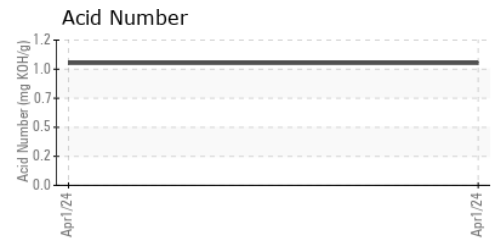
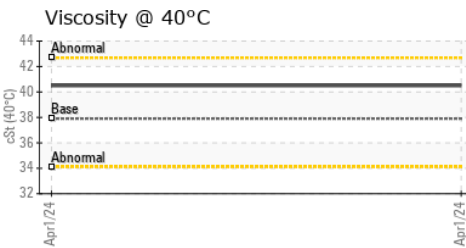
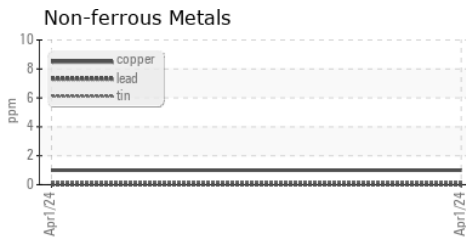
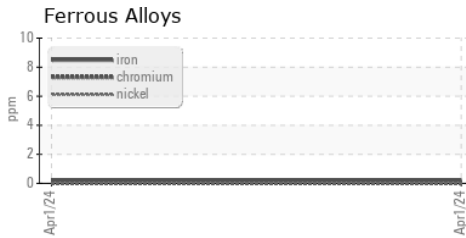
| VISUAL           | method | limit/base | current | history1 | history2 |     |
|------------------|--------|------------|---------|----------|----------|-----|
| White Metal      | scalar | *Visual    | NONE    | NONE     | ---      | --- |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | ---      | --- |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | ---      | --- |
| Silt             | scalar | *Visual    | NONE    | NONE     | ---      | --- |
| Debris           | scalar | *Visual    | NONE    | ▲ MODER  | ---      | --- |
| Sand/Dirt        | scalar | *Visual    | NONE    | NONE     | ---      | --- |
| Appearance       | scalar | *Visual    | NORML   | NORML    | ---      | --- |
| Odor             | scalar | *Visual    | NORML   | NORML    | ---      | --- |
| Emulsified Water | scalar | *Visual    | >0.1    | NEG      | ---      | --- |
| Free Water       | scalar | *Visual    |         | NEG      | ---      | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |     |
|------------------|--------|------------|---------|----------|----------|-----|
| Visc @ 40°C      | cSt    | ASTM D445  | 37.9    | 40.5     | ---      | --- |

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

|        |   |          |          |
|--------|---|----------|----------|
| Color  |  | no image | no image |
| Bottom |  | no image | no image |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0918405  
**Lab Number** : 06142971  
**Unique Number** : 10967779  
**Test Package** : CONST

**Received** : 09 Apr 2024  
**Tested** : 11 Apr 2024  
**Diagnosed** : 11 Apr 2024 - Don Baldrige

**SHERWOOD CONSTRUCTION CO INC**  
 3219 WEST MAY ST  
 WICHITA, KS  
 US 67213  
 Contact: BILL ORCUTT  
 william.orcutt@wildcat.net

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)

T:  
F: