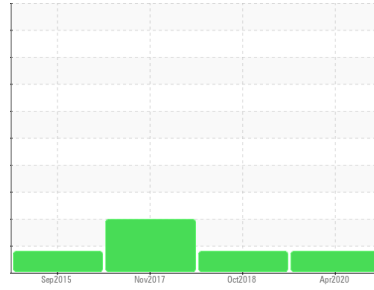




# PROBLEM SUMMARY

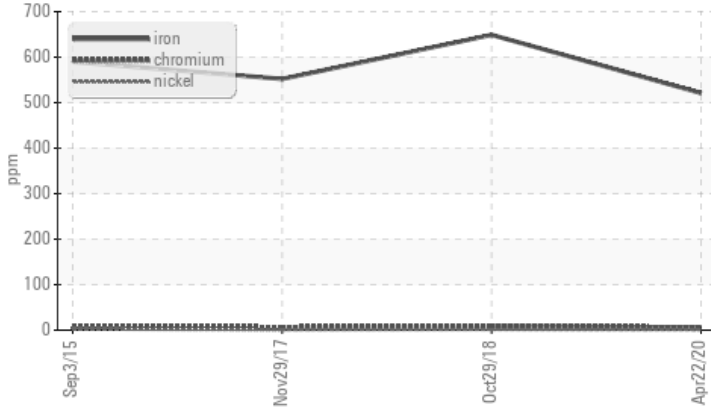
Area  
**KANSAS/44/EG - BACKHOE LOADER**  
 Machine Id  
**53.501L [KANSAS^44^EG - BACKHOE LOADER]**  
 Component  
**Rear Left Planetary**  
 Fluid  
**MOBIL DELVAC 1330 (--- GAL)**

Sample Rating Trend



## COMPONENT CONDITION SUMMARY

### ▲ Ferrous Alloys



## RECOMMENDATION

No corrective action is recommended at this time. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

| Sample Status | ABNORMAL | ABNORMAL    | ABNORMAL |
|---------------|----------|-------------|----------|
| Iron          | ppm      | ASTM D5185m | >500     |
|               | ▲ 521    | ▲ 649       | ▲ 552    |

Customer Id: SHEWIC  
 Sample No.: WC0421658  
 Lab Number: 04973768  
 Test Package: MOBCE



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

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 29 Oct 2018 Diag: Jonathan Hester

#### WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. Gear wear is indicated. There is no indication of any contamination in the component. The condition of the oil is acceptable for the time in service.

view report



### 29 Nov 2017 Diag: Don Baldrige

#### VISUAL METAL



No corrective action is recommended at this time. Resample at the next service interval to monitor. Moderate concentration of visible metal present. Gear wear is indicated. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report



### 03 Sep 2015 Diag: Don Baldrige

#### WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. Gear wear is indicated. There is no indication of any contamination in the component. The condition of the oil is acceptable for the time in service.

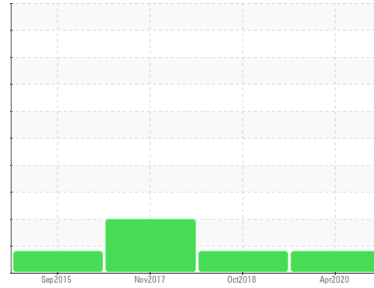
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area  
**KANSAS/44/EG - BACKHOE LOADER**  
 Machine Id  
**53.501L [KANSAS^44^EG - BACKHOE LOADER]**  
 Component  
**Rear Left Planetary**  
 Fluid  
**MOBIL DELVAC 1330 (--- GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

Gear wear is indicated.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

| method        | limit/base  | current            | history1    | history2    |
|---------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | <b>WC0421658</b>   | WCCF5961    | WCCF3455    |
| Sample Date   | Client Info | <b>22 Apr 2020</b> | 29 Oct 2018 | 29 Nov 2017 |
| Machine Age   | hrs         | <b>6191</b>        | 5055        | 4574        |
| Oil Age       | hrs         | <b>0</b>           | 0           | 0           |
| Oil Changed   | Client Info | <b>Changed</b>     | Changed     | Not Changd  |
| Sample Status |             | <b>ABNORMAL</b>    | ABNORMAL    | ABNORMAL    |

## WEAR METALS

| method       | limit/base       | current      | history1 | history2 |
|--------------|------------------|--------------|----------|----------|
| Iron ppm     | ASTM D5185m >500 | <b>▲ 521</b> | ▲ 649    | ▲ 552    |
| Chromium ppm | ASTM D5185m >10  | <b>6</b>     | 9        | 6        |
| Nickel ppm   | ASTM D5185m      | <b>&lt;1</b> | 1        | 1        |
| Titanium ppm | ASTM D5185m      | <b>&lt;1</b> | 0        | 0        |
| Silver ppm   | ASTM D5185m      | <b>0</b>     | 0        | 0        |
| Aluminum ppm | ASTM D5185m >25  | <b>1</b>     | 1        | <1       |
| Lead ppm     | ASTM D5185m >25  | <b>1</b>     | <1       | <1       |
| Copper ppm   | ASTM D5185m >75  | <b>&lt;1</b> | 1        | 1        |
| Tin ppm      | ASTM D5185m >10  | <b>0</b>     | 0        | <1       |
| Antimony ppm | ASTM D5185m      | <b>&lt;1</b> | 0        | 0        |
| Vanadium ppm | ASTM D5185m      | <b>0</b>     | 0        | 0        |
| Cadmium ppm  | ASTM D5185m      | <b>0</b>     | <1       | 0        |

## ADDITIVES

| method         | limit/base  | current     | history1 | history2 |
|----------------|-------------|-------------|----------|----------|
| Boron ppm      | ASTM D5185m | <b>26</b>   | 6        | 6        |
| Barium ppm     | ASTM D5185m | <b>0</b>    | 0        | <1       |
| Molybdenum ppm | ASTM D5185m | <b>0</b>    | 0        | 0        |
| Manganese ppm  | ASTM D5185m | <b>2</b>    | 3        | 3        |
| Magnesium ppm  | ASTM D5185m | <b>18</b>   | 26       | 22       |
| Calcium ppm    | ASTM D5185m | <b>3071</b> | 3227     | 2779     |
| Phosphorus ppm | ASTM D5185m | <b>916</b>  | 992      | 965      |
| Zinc ppm       | ASTM D5185m | <b>1194</b> | 1075     | 1021     |
| Sulfur ppm     | ASTM D5185m | <b>4913</b> | 14128    | 4079     |

## CONTAMINANTS

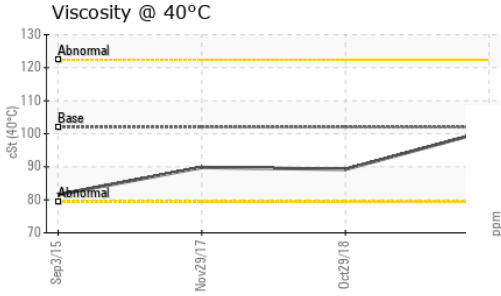
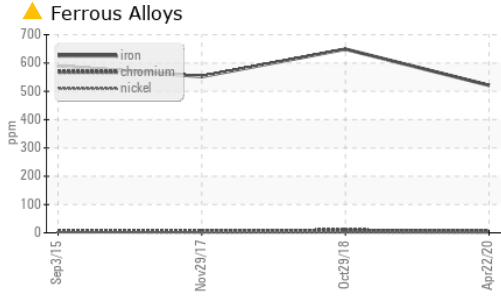
| method        | limit/base      | current   | history1 | history2 |
|---------------|-----------------|-----------|----------|----------|
| Silicon ppm   | ASTM D5185m >75 | <b>10</b> | 5        | 4        |
| Sodium ppm    | ASTM D5185m     | <b>2</b>  | 2        | 2        |
| Potassium ppm | ASTM D5185m >20 | <b>3</b>  | 1        | 1        |

## VISUAL

| method                  | limit/base    | current      | history1 | history2 |
|-------------------------|---------------|--------------|----------|----------|
| White Metal scalar      | *Visual NONE  | <b>LIGHT</b> | LIGHT    | ▲ MODER  |
| Yellow Metal scalar     | *Visual NONE  | <b>NONE</b>  | NONE     | NONE     |
| Precipitate scalar      | *Visual NONE  | <b>NONE</b>  | NONE     | NONE     |
| Silt scalar             | *Visual NONE  | <b>NONE</b>  | NONE     | NONE     |
| Debris scalar           | *Visual NONE  | <b>NONE</b>  | NONE     | NONE     |
| Sand/Dirt scalar        | *Visual NONE  | <b>NONE</b>  | NONE     | NONE     |
| Appearance scalar       | *Visual NORML | <b>NORML</b> | NORML    | NORML    |
| Odor scalar             | *Visual NORML | <b>NORML</b> | NORML    | NORML    |
| Emulsified Water scalar | *Visual >0.2  | <b>NEG</b>   | NEG      | NEG      |
| Free Water scalar       | *Visual       | <b>NEG</b>   | NEG      | NEG      |



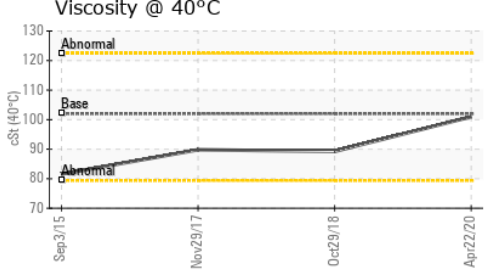
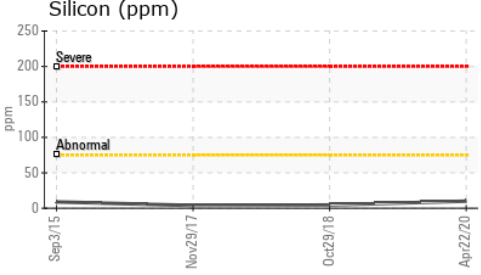
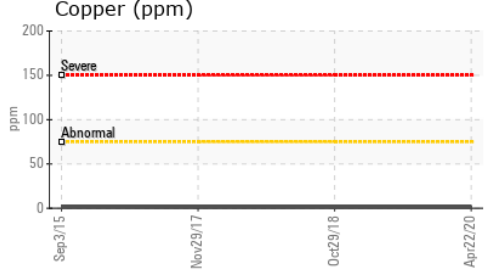
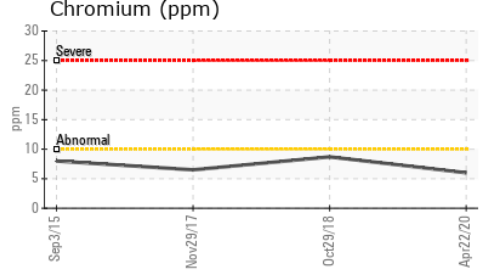
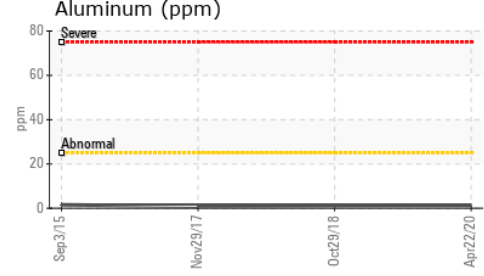
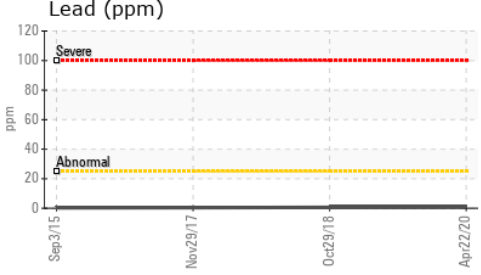
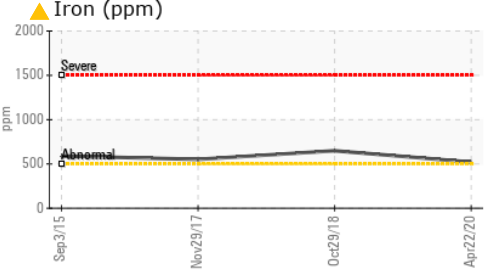
# OIL ANALYSIS REPORT



| FLUID PROPERTIES | method | limit/base    | current    | history1 | history2 |
|------------------|--------|---------------|------------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445 102 | <b>101</b> | 89.23    | 89.81    |

| 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.** : WC0421658 **Received** : 11 May 2020  
**Lab Number** : **04973768** **Diagnosed** : 12 May 2020  
**Unique Number** : 9023910 **Diagnostician** : Don Baldrige  
**Test Package** : MOBCE ( Additional Tests: PQ )

**SHERWOOD CONSTRUCTION CO INC**  
 3219 WEST MAY ST  
 WICHITA, KS  
 US 67213  
 Contact: DOUG KING  
 doug.king@sherwood.net  
 T: (316)617-3161  
 F: x:

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)