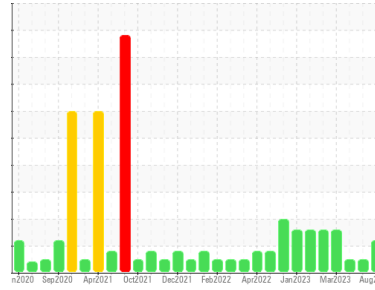


# PROBLEM SUMMARY

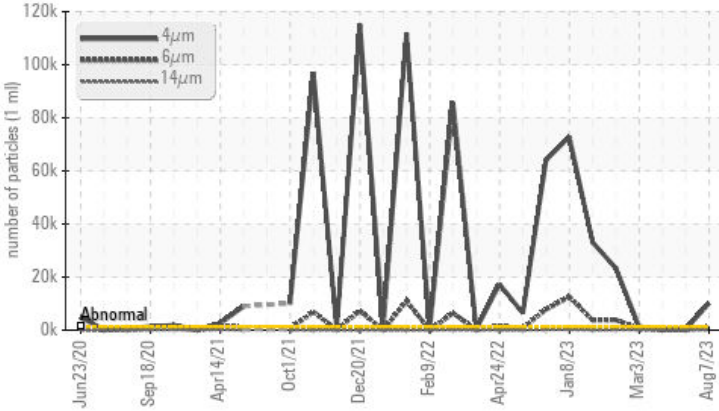
Area  
**NAT CUTS [BEFORE]**  
 Machine Id  
**LINE 1 CUBER**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 460 (--- GAL)**

Sample Rating Trend



## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

| Sample Status   |              |           | ABNORMAL   | NORMAL   | NORMAL   |
|-----------------|--------------|-----------|------------|----------|----------|
| Particles >4µm  | ASTM D7647   | >1300     | ▲ 10068    | 321      | 251      |
| Particles >6µm  | ASTM D7647   | >320      | ▲ 1279     | 137      | 107      |
| Oil Cleanliness | ISO 4406 (c) | >17/15/13 | ▲ 21/17/12 | 16/14/11 | 15/14/11 |

Customer Id: KRASPRMO  
 Sample No.: PCA0101631  
 Lab Number: 05929565  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Angela Borella +1 800-237-1369  
[angela.borella@wearcheckusa.com](mailto:angela.borella@wearcheckusa.com)

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   |
|---------------|--------|-------------|---------|---|
| Change Filter | MISSED | Aug 22 2023 | ?       | We recommend you service the filters on this component. |

## HISTORICAL DIAGNOSIS

### 05 May 2023 Diag: Doug Bogart

NORMAL



Resample at the next service interval to monitor. AFTERAll component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 30 Apr 2023 Diag: Doug Bogart

NORMAL



Resample at the next service interval to monitor. BEFOREAll component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 03 Mar 2023 Diag: Don Baldrige

ISO

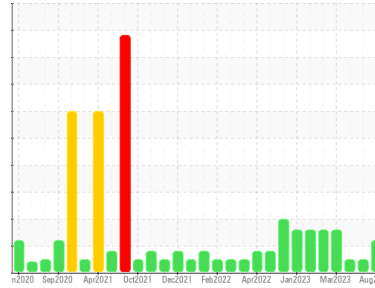


No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Area  
**NAT CUTS [BEFORE]**  
 Machine Id  
**LINE 1 CUBER**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 460 (--- GAL)**



## DIAGNOSIS

**Recommendation**  
 We recommend you service the filters on this component. Resample at the next service interval to monitor.

**Wear**  
 All component wear rates are normal.

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

## SAMPLE INFORMATION

| method        | limit/base  | current            | history1    | history2    |
|---------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | <b>PCA0101631</b>  | PCA0096818  | PCA0096819  |
| Sample Date   | Client Info | <b>07 Aug 2023</b> | 05 May 2023 | 30 Apr 2023 |
| Machine Age   | days        | Client Info        | 5           | 5           |
| Oil Age       | days        | Client Info        | 5           | 5           |
| Oil Changed   | Client Info | <b>N/A</b>         | Filtered    | Filtered    |
| Sample Status |             | <b>ABNORMAL</b>    | NORMAL      | NORMAL      |

## WEAR METALS

| method       | limit/base      | current      | history1 | history2 |
|--------------|-----------------|--------------|----------|----------|
| Iron ppm     | ASTM D5185m >20 | <b>7</b>     | 6        | 6        |
| Chromium ppm | ASTM D5185m >20 | <b>1</b>     | 1        | 1        |
| Nickel ppm   | ASTM D5185m >20 | <b>0</b>     | 0        | 0        |
| Titanium ppm | ASTM D5185m     | <b>&lt;1</b> | <1       | <1       |
| Silver ppm   | ASTM D5185m     | <b>0</b>     | 0        | 0        |
| Aluminum ppm | ASTM D5185m >20 | <b>0</b>     | 3        | 3        |
| Lead ppm     | ASTM D5185m >20 | <b>&lt;1</b> | <1       | 0        |
| Copper ppm   | ASTM D5185m >20 | <b>8</b>     | 6        | 6        |
| Tin ppm      | ASTM D5185m >20 | <b>0</b>     | <1       | <1       |
| Vanadium ppm | ASTM D5185m     | <b>&lt;1</b> | 0        | 0        |
| Cadmium ppm  | ASTM D5185m     | <b>0</b>     | 0        | 0        |

## ADDITIVES

| method         | limit/base       | current    | history1 | history2 |
|----------------|------------------|------------|----------|----------|
| Boron ppm      | ASTM D5185m 5    | <b>0</b>   | 0        | 0        |
| Barium ppm     | ASTM D5185m 5    | <b>0</b>   | 0        | 0        |
| Molybdenum ppm | ASTM D5185m 5    | <b>0</b>   | <1       | 0        |
| Manganese ppm  | ASTM D5185m      | <b>0</b>   | <1       | <1       |
| Magnesium ppm  | ASTM D5185m 25   | <b>0</b>   | 9        | 7        |
| Calcium ppm    | ASTM D5185m 200  | <b>0</b>   | 4        | 1        |
| Phosphorus ppm | ASTM D5185m 300  | <b>369</b> | 357      | 371      |
| Zinc ppm       | ASTM D5185m 370  | <b>23</b>  | 36       | 34       |
| Sulfur ppm     | ASTM D5185m 2500 | <b>950</b> | 781      | 776      |

## CONTAMINANTS

| method        | limit/base      | current      | history1 | history2 |
|---------------|-----------------|--------------|----------|----------|
| Silicon ppm   | ASTM D5185m >15 | <b>3</b>     | 3        | 3        |
| Sodium ppm    | ASTM D5185m     | <b>&lt;1</b> | <1       | <1       |
| Potassium ppm | ASTM D5185m >20 | <b>0</b>     | 0        | 0        |

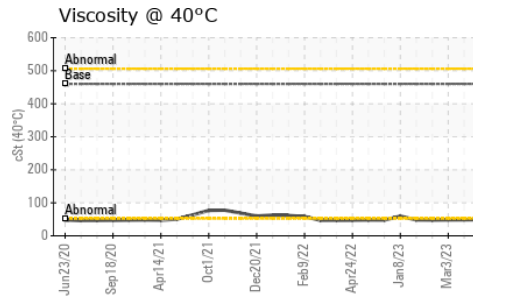
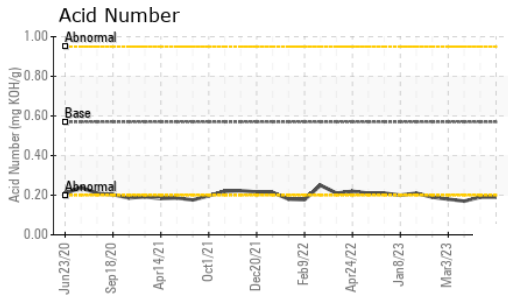
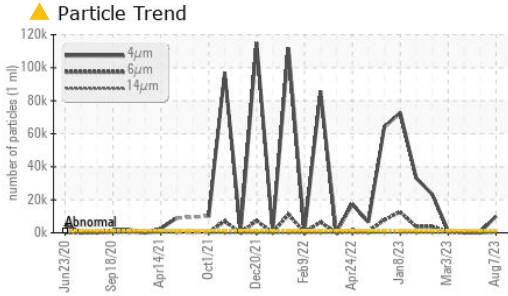
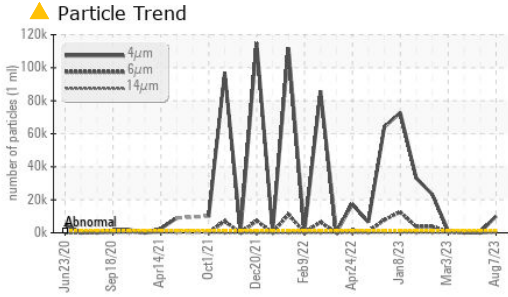
## FLUID CLEANLINESS

| method          | limit/base             | current           | history1 | history2 |
|-----------------|------------------------|-------------------|----------|----------|
| Particles >4µm  | ASTM D7647 >1300       | <b>▲ 10068</b>    | 321      | 251      |
| Particles >6µm  | ASTM D7647 >320        | <b>▲ 1279</b>     | 137      | 107      |
| Particles >14µm | ASTM D7647 >80         | <b>25</b>         | 19       | 11       |
| Particles >21µm | ASTM D7647 >20         | <b>6</b>          | 3        | 3        |
| Particles >38µm | ASTM D7647 >4          | <b>1</b>          | 1        | 0        |
| Particles >71µm | ASTM D7647 >3          | <b>0</b>          | 0        | 0        |
| Oil Cleanliness | ISO 4406 (c) >17/15/13 | <b>▲ 21/17/12</b> | 16/14/11 | 15/14/11 |

## FLUID DEGRADATION

| method                    | limit/base      | current     | history1 | history2 |
|---------------------------|-----------------|-------------|----------|----------|
| Acid Number (AN) mg KOH/g | ASTM D8045 0.57 | <b>0.19</b> | 0.19     | 0.17     |

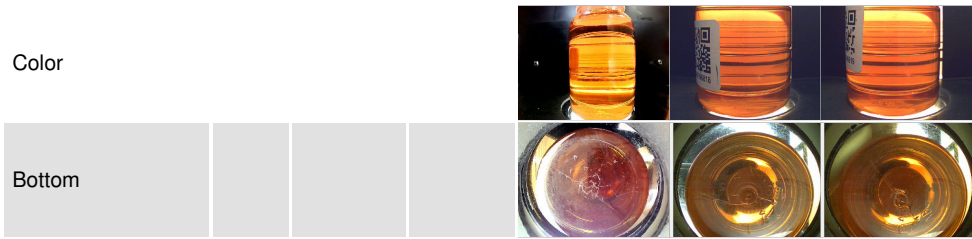
# OIL ANALYSIS REPORT



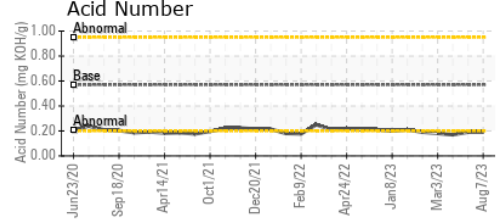
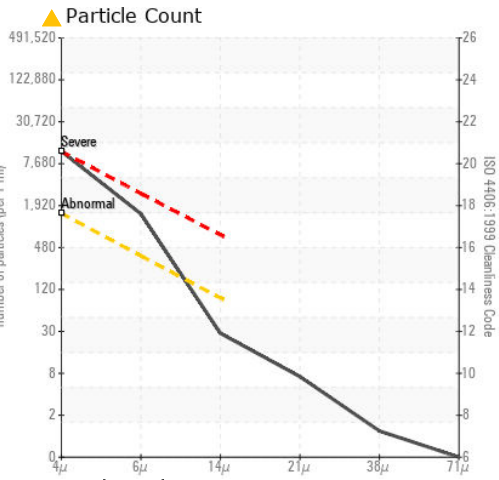
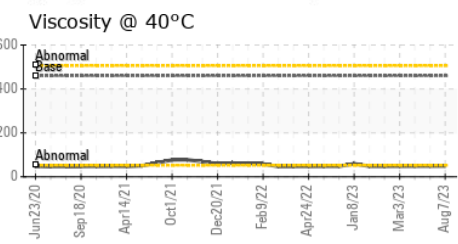
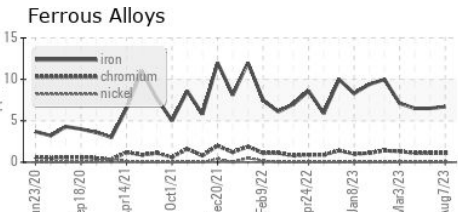
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
|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

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 460     | 49.1     | 48.8     |

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



## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0101631  
**Lab Number** : 05929565  
**Unique Number** : 10609512  
**Test Package** : IND 2

**KraftHeinz - Springfield - Plant 8311 PCA**  
 2035 E BENNETT  
 SPRINGFIELD, MO  
 US 65804  
 Contact: Service Manager

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: