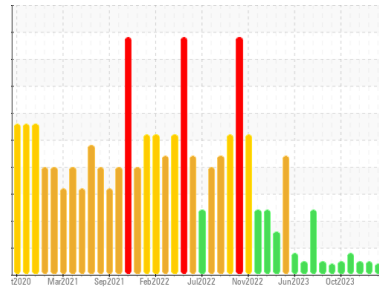


# OIL ANALYSIS REPORT

Sample Rating Trend



**VIS DEBRIS**



Area

**GRIND ROOM [98891755]**

Machine Id

**KR-GR-003072 - DUMPER 5A (S/N GRIND A - 11513013)**

Component

**Hydraulic System**

Fluid

**AW HYDRAULIC OIL ISO 68 (--- GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component if applicable. 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. ( Customer Sample Comment: 98891755 )

### 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>PCA0119597</b>  | PCA0115887  | PCA0113104  |
| Sample Date   | Client Info | <b>17 Apr 2024</b> | 14 Mar 2024 | 23 Nov 2023 |
| Machine Age   | hrs         | <b>0</b>           | 0           | 0           |
| Oil Age       | hrs         | <b>0</b>           | 0           | 0           |
| Oil Changed   | Client Info | <b>Not Changed</b> | N/A         | N/A         |
| Sample Status |             | <b>ABNORMAL</b>    | NORMAL      | NORMAL      |

## CONTAMINATION

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

## WEAR METALS

| method   | limit/base | current     | history1 | history2     |    |   |
|----------|------------|-------------|----------|--------------|----|---|
| Iron     | ppm        | ASTM D5185m | >20      | <b>&lt;1</b> | <1 | 0 |
| Chromium | ppm        | ASTM D5185m | >20      | <b>0</b>     | <1 | 0 |
| Nickel   | ppm        | ASTM D5185m | >20      | <b>0</b>     | 0  | 0 |
| Titanium | ppm        | ASTM D5185m |          | <b>0</b>     | <1 | 0 |
| Silver   | ppm        | ASTM D5185m |          | <b>0</b>     | 0  | 0 |
| Aluminum | ppm        | ASTM D5185m | >20      | <b>0</b>     | 3  | 0 |
| Lead     | ppm        | ASTM D5185m | >20      | <b>0</b>     | <1 | 0 |
| Copper   | ppm        | ASTM D5185m | >20      | <b>0</b>     | <1 | 0 |
| Tin      | ppm        | ASTM D5185m | >20      | <b>0</b>     | <1 | 0 |
| Vanadium | ppm        | ASTM D5185m |          | <b>&lt;1</b> | <1 | 0 |
| Cadmium  | ppm        | ASTM D5185m |          | <b>0</b>     | <1 | 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>     | <1  | 0   |
| Molybdenum | ppm        | ASTM D5185m | 5        | <b>0</b>     | 0   | 0   |
| Manganese  | ppm        | ASTM D5185m |          | <b>0</b>     | 0   | 0   |
| Magnesium  | ppm        | ASTM D5185m | 25       | <b>&lt;1</b> | 0   | 0   |
| Calcium    | ppm        | ASTM D5185m | 200      | <b>&lt;1</b> | 3   | <1  |
| Phosphorus | ppm        | ASTM D5185m | 300      | <b>339</b>   | 375 | 368 |
| Zinc       | ppm        | ASTM D5185m | 370      | <b>0</b>     | 1   | 0   |
| Sulfur     | ppm        | ASTM D5185m | 2500     | <b>461</b>   | 356 | 395 |

## CONTAMINANTS

| method    | limit/base | current     | history1 | history2 |   |   |
|-----------|------------|-------------|----------|----------|---|---|
| Silicon   | ppm        | ASTM D5185m | >15      | <b>1</b> | 2 | 1 |
| Sodium    | ppm        | ASTM D5185m |          | <b>0</b> | 0 | 0 |
| Potassium | ppm        | ASTM D5185m | >20      | <b>0</b> | 1 | 0 |

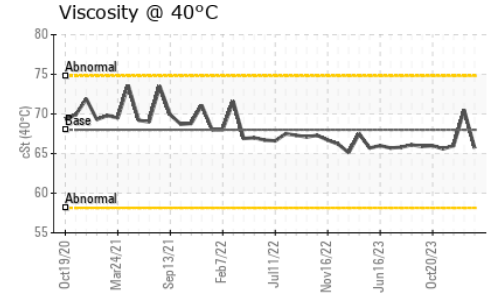
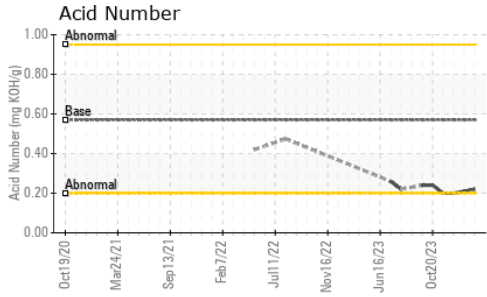
## FLUID CLEANLINESS

| method          | limit/base   | current   | history1 | history2 |          |
|-----------------|--------------|-----------|----------|----------|----------|
| Particles >4µm  | ASTM D7647   | >10000    | ---      | 8143     | 7342     |
| Particles >6µm  | ASTM D7647   | >2500     | ---      | 2202     | 1852     |
| Particles >14µm | ASTM D7647   | >640      | ---      | 178      | 123      |
| Particles >21µm | ASTM D7647   | >160      | ---      | 40       | 24       |
| Particles >38µm | ASTM D7647   | >40       | ---      | 1        | 1        |
| Particles >71µm | ASTM D7647   | >10       | ---      | 0        | 1        |
| Oil Cleanliness | ISO 4406 (c) | >20/18/16 | ---      | 20/18/15 | 20/18/14 |

## FLUID DEGRADATION

| method           | limit/base | current    | history1 | history2    |      |      |
|------------------|------------|------------|----------|-------------|------|------|
| Acid Number (AN) | mg KOH/g   | ASTM D8045 | 0.57     | <b>0.22</b> | 0.21 | 0.20 |

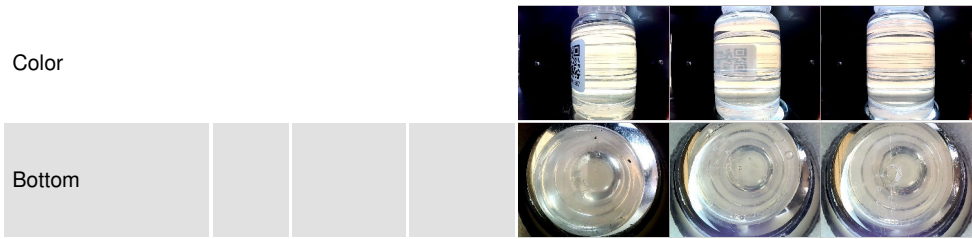
# OIL ANALYSIS REPORT



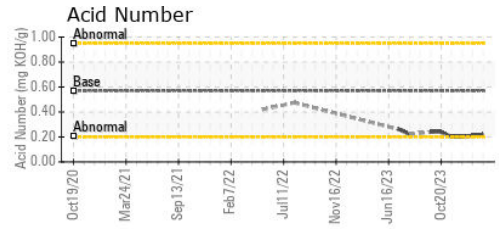
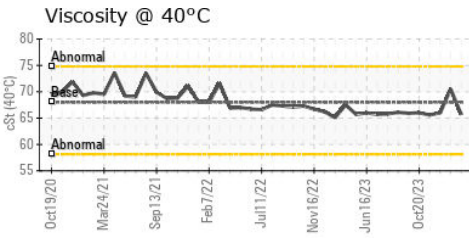
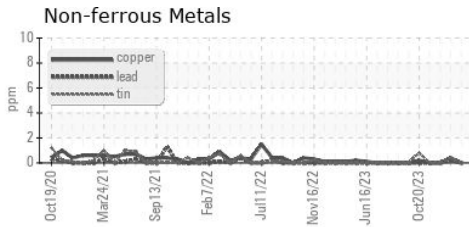
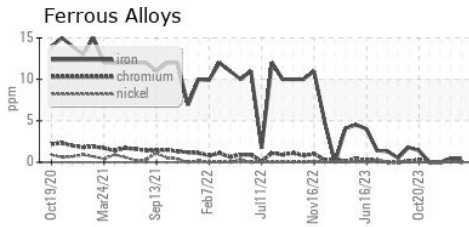
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual    | NONE    | NONE     | NONE     |
| Debris           | scalar | *Visual    | ▲ MODER | 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 68 | 65.7    | 70.5     | 66.0     |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0119597  
**Lab Number** : 06155847  
**Unique Number** : 10991270  
**Test Package** : IND 2

**Received** : 22 Apr 2024  
**Tested** : 24 Apr 2024  
**Diagnosed** : 24 Apr 2024 - Don Baldrige

**KraftHeinz - Kirksville - Plant 8333 PCA**  
 2504 INDUSTRIAL DR  
 KIRKSVILLE, MO  
 US 63501  
 Contact: WALLACE WARD  
 wallace.ward@kraftheinzcompany.com  
 T: (660)627-1031  
 F: (660)627-5887

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)