

# **PROBLEM SUMMARY**

# Sample Rating Trend

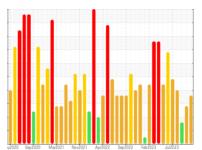
# Area [98543955]

KR-GR-003109 - E DUMPER 15A (S/N MIX A - 11513055)

Component

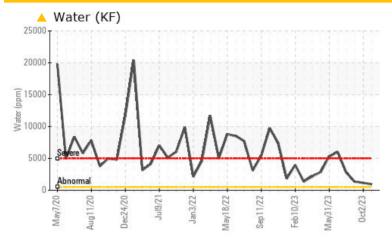
**Hydraulic System** 

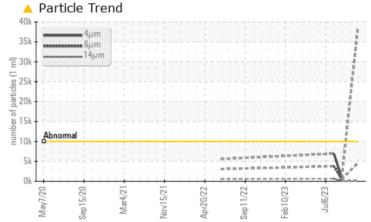
**AW HYDRAULIC OIL ISO 68 (--- GAL)** 





# **COMPONENT CONDITION SUMMARY**





# RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

| PROBLEMATIC TEST RESULTS |        |              |           |                 |                |                |  |  |  |  |
|--------------------------|--------|--------------|-----------|-----------------|----------------|----------------|--|--|--|--|
| Sample Status            |        |              |           | ABNORMAL        | ABNORMAL       | ABNORMAL       |  |  |  |  |
| Water                    | %      | ASTM D6304   | >0.05     | <b>△</b> 0.095  | <b>△</b> 0.116 | <b>△</b> 0.134 |  |  |  |  |
| ppm Water                | ppm    | ASTM D6304   | >500      | <b>950</b>      | <u> </u>       | <u> </u>       |  |  |  |  |
| Particles >4µm           |        | ASTM D7647   | >10000    | <u>^</u> 38691  |                | 974            |  |  |  |  |
| Particles >6µm           |        | ASTM D7647   | >2500     | <b>4549</b>     |                | 531            |  |  |  |  |
| Oil Cleanliness          |        | ISO 4406 (c) | >20/18/16 | <u>22/19/14</u> |                | 17/16/14       |  |  |  |  |
| Appearance               | scalar | *Visual      | NORML     | ▲ HAZY          | ▲ HAZY         | NORML          |  |  |  |  |

Customer Id: KRAKIR Sample No.: PCA0106506 Lab Number: 05986442 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 jhester@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

# RECOMMENDED ACTIONS

There are no recommended actions for this sample.

# HISTORICAL DIAGNOSIS

# 02 Oct 2023 Diag: Angela Borella

#### WATER



We advise that you check for the source of water entry. We recommend you service the filters on this component. We were unable to perform a particle count due to a high concentration of particles present in this sample.All component wear rates are normal. Appearance is hazy. There is a light concentration of water present in the oil. High concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.



### 05 Sep 2023 Diag: Jonathan Hester

#### WATER



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a light concentration of water present 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

# 31 Jul 2023 Diag: Jonathan Hester

#### WAIER



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





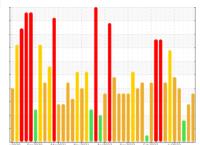
# **OIL ANALYSIS REPORT**

# [98543955]

# KR-GR-003109 - E DUMPER 15A (S/N MIX A - 11513055)

**Hydraulic System** 

AW HYDRAULIC OIL ISO 68 (--- GAL)



Sample Rating Trend



# **DIAGNOSIS**

## Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

All component wear rates are normal.

# Contamination

Appearance is hazy. There is a high amount of silt (particulates < 14 microns in size) present in the oil. There is a light concentration of water present in the

## Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

|                   |            | y2020 Sep20  | 20 Mar2021 Nov2021 | Apr2022 Sep2022 Feb2023 J | ul2023         |                |
|-------------------|------------|--------------|--------------------|---------------------------|----------------|----------------|
| SAMPLE INFORM     | MATION     | method       | limit/base         | current                   | history1       | history2       |
| Sample Number     |            | Client Info  |                    | PCA0106506                | PCA0104785     | PCA0103751     |
| Sample Date       |            | Client Info  |                    | 22 Oct 2023               | 02 Oct 2023    | 05 Sep 2023    |
| Machine Age       | hrs        | Client Info  |                    | 0                         | 0              | 0              |
| Oil Age           | hrs        | Client Info  |                    | 0                         | 0              | 0              |
| Oil Changed       |            | Client Info  |                    | N/A                       | N/A            | N/A            |
| Sample Status     |            |              |                    | ABNORMAL                  | ABNORMAL       | ABNORMAL       |
| WEAR METALS       | 3          | method       | limit/base         | current                   | history1       | history2       |
| Iron              | ppm        | ASTM D5185m  | >20                | 0                         | 1              | 0              |
| Chromium          | ppm        | ASTM D5185m  | >20                | <1                        | <1             | 0              |
| Nickel            | ppm        | ASTM D5185m  | >20                | 1                         | 0              | 0              |
| Titanium          | ppm        | ASTM D5185m  |                    | 0                         | 0              | 0              |
| Silver            | ppm        | ASTM D5185m  |                    | 0                         | 0              | 0              |
| Aluminum          | ppm        | ASTM D5185m  | >20                | <1                        | 0              | 1              |
| Lead              | ppm        | ASTM D5185m  | >20                | <1                        | 0              | 0              |
| Copper            | ppm        | ASTM D5185m  | >20                | 0                         | <1             | 0              |
| Tin               | ppm        | ASTM D5185m  | >20                | <1                        | 0              | 0              |
| Vanadium          | ppm        | ASTM D5185m  |                    | 0                         | 0              | <1             |
| Cadmium           | ppm        | ASTM D5185m  |                    | 0                         | 0              | 0              |
| ADDITIVES         | PPIII      | method       | limit/base         | current                   | history1       | history2       |
|                   |            |              |                    |                           |                |                |
| Boron             | ppm        | ASTM D5185m  | 5                  | 0                         | 0              | 0              |
| Barium            | ppm        | ASTM D5185m  | 5                  | 0                         | 0              | 0              |
| Molybdenum        | ppm        | ASTM D5185m  | 5                  | 0                         | 0              | 0              |
| Manganese         | ppm        | ASTM D5185m  |                    | <1                        | 0              | 0              |
| Magnesium         | ppm        | ASTM D5185m  | 25                 | 4                         | <1             | 0              |
| Calcium           | ppm        | ASTM D5185m  | 200                | 2                         | <1             | 0              |
| Phosphorus        | ppm        | ASTM D5185m  | 300                | 459                       | 434            | 494            |
| Zinc              | ppm        | ASTM D5185m  | 370                | 0                         | 2              | 0              |
| Sulfur            | ppm        | ASTM D5185m  | 2500               | 535                       | 547            | 552            |
| CONTAMINANT       | ΓS         | method       | limit/base         | current                   | history1       | history2       |
| Silicon           | ppm        | ASTM D5185m  | >15                | 2                         | 2              | 1              |
| Sodium            | ppm        | ASTM D5185m  |                    | 4                         | 3              | 2              |
| Potassium         | ppm        | ASTM D5185m  | >20                | 2                         | 1              | 0              |
| Water             | %          | ASTM D6304   | >0.05              | <b>0.095</b>              | <b>△</b> 0.116 | <b>△</b> 0.134 |
| ppm Water         | ppm        | ASTM D6304   | >500               | <u> </u>                  | <b>▲</b> 1160  | <b>△</b> 1340  |
| FLUID CLEANL      | INESS      | method       | limit/base         | current                   | history1       | history2       |
| Particles >4µm    |            | ASTM D7647   | >10000             | <u> </u>                  |                | 974            |
| Particles >6μm    |            | ASTM D7647   | >2500              | <b>4549</b>               |                | 531            |
| Particles >14μm   |            | ASTM D7647   | >640               | 118                       |                | 90             |
| Particles >21µm   |            | ASTM D7647   | >160               | 24                        |                | 30             |
| Particles >38µm   |            | ASTM D7647   | >40                | 1                         |                | 5              |
| Particles >71µm   |            | ASTM D7647   | >10                | 0                         |                | 0              |
| Oil Cleanliness   |            | ISO 4406 (c) | >20/18/16          | <u>22/19/14</u>           |                | 17/16/14       |
| FLUID DEGRAD      | ATION      | method       | limit/base         | current                   | history1       | history2       |
| Acid Number (ANI) | ma I/OII/a | ACTM DODAE   |                    | 0.01                      | 0.04           | 0.00           |

Acid Number (AN)

0.24

0.21

mg KOH/g ASTM D8045 0.57

0.29



# **OIL ANALYSIS REPORT**

