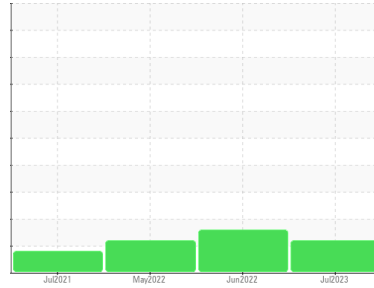


PROBLEM SUMMARY

Sample Rating Trend



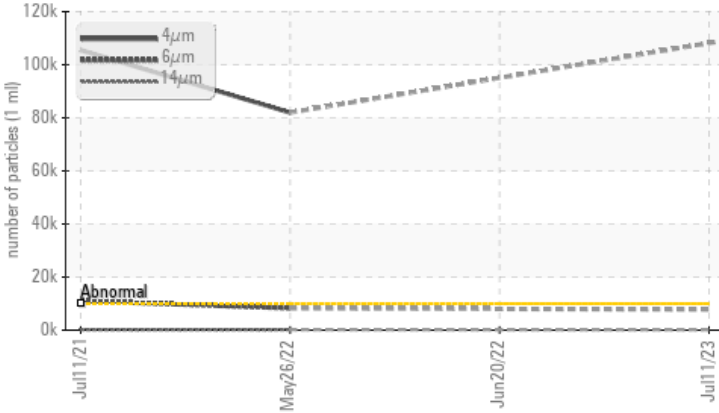
ISO



Machine Id
CELL 2 GRINDER 1
Component
Gearbox
Fluid
MOBIL SHC CIBUS 220 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

| Sample Status | | | ABNORMAL | ATTENTION | ABNORMAL |
|-----------------|--------------|-----------|------------|-----------|------------|
| Particles >4µm | ASTM D7647 | >10000 | ▲ 108185 | --- | ▲ 81965 |
| Particles >6µm | ASTM D7647 | >2500 | ▲ 7777 | --- | ▲ 8206 |
| Oil Cleanliness | ISO 4406 (c) | >20/18/16 | ▲ 24/20/14 | --- | ▲ 24/20/14 |

Customer Id: KRANEW
Sample No.: PCA0094155
Lab Number: 05901277
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +1
don.b505@comcast.net

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

RECOMMENDED ACTIONS

| Action | Status | Date | Done By | Description |
|---------------|--------|------|---------|---|
| Change Filter | --- | --- | ? | We recommend you service the filters on this component if applicable. |

HISTORICAL DIAGNOSIS

20 Jun 2022 Diag: Jonathan Hester

VISCOSITY



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. Additive levels indicate the addition of a different brand, or type of oil. Viscosity of sample indicates oil is within ISO 220 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

view report



26 May 2022 Diag: Doug Bogart

ISO



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



11 Jul 2021 Diag: Jonathan Hester

ISO



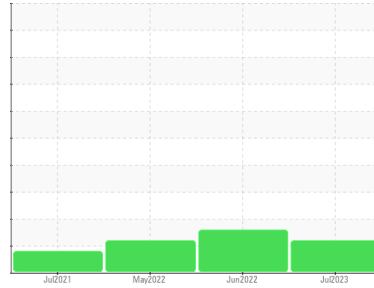
We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report





Machine Id
CELL 2 GRINDER 1
 Component
Gearbox
 Fluid
MOBIL SHC CIBUS 220 (--- GAL)



DIAGNOSIS

Recommendation
 We recommend you service the filters on this component if applicable. 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 | PCA0094155 | PCA0073720 | PCA0056137 |
| Sample Date | Client Info | 11 Jul 2023 | 20 Jun 2022 | 26 May 2022 |
| Machine Age | hrs | Client Info | 0 | 0 |
| Oil Age | hrs | Client Info | 0 | 0 |
| Oil Changed | Client Info | N/A | N/A | N/A |
| Sample Status | | ABNORMAL | ATTENTION | ABNORMAL |

WEAR METALS

| method | limit/base | current | history1 | history2 | |
|----------|------------|------------------|--------------|----------|-----|
| Iron | ppm | ASTM D5185m >200 | 31 | 29 | 5 |
| Chromium | ppm | ASTM D5185m >15 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m >15 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | <1 | <1 | 0 |
| Silver | ppm | ASTM D5185m | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >25 | 1 | 0 | 0 |
| Lead | ppm | ASTM D5185m >100 | 0 | <1 | 0 |
| Copper | ppm | ASTM D5185m >200 | <1 | <1 | 0 |
| Tin | ppm | ASTM D5185m >25 | <1 | <1 | 0 |
| Antimony | ppm | ASTM D5185m >5 | --- | --- | --- |
| Vanadium | ppm | ASTM D5185m | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | 0 | 0 | 0 |

ADDITIVES

| method | limit/base | current | history1 | history2 | |
|------------|------------|-------------|--------------|----------|-----|
| Boron | ppm | ASTM D5185m | 0 | 1 | 12 |
| Barium | ppm | ASTM D5185m | 0 | 2 | <1 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | <1 |
| Manganese | ppm | ASTM D5185m | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | <1 | <1 | <1 |
| Calcium | ppm | ASTM D5185m | 20 | ▲ 19 | 192 |
| Phosphorus | ppm | ASTM D5185m | 420 | ▲ 339 | 702 |
| Zinc | ppm | ASTM D5185m | 12 | 21 | 13 |
| Sulfur | ppm | ASTM D5185m | 12337 | ▲ 10248 | 646 |

CONTAMINANTS

| method | limit/base | current | history1 | history2 | |
|-----------|------------|-----------------|--------------|----------|----|
| Silicon | ppm | ASTM D5185m >50 | 19 | 22 | 3 |
| Sodium | ppm | ASTM D5185m | 4 | 2 | 0 |
| Potassium | ppm | ASTM D5185m >20 | <1 | 1 | <1 |

FLUID CLEANLINESS

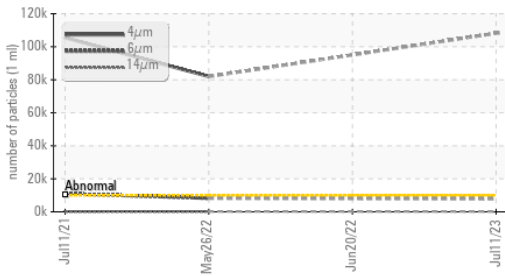
| method | limit/base | current | history1 | history2 |
|-----------------|------------------------|-------------------|----------|------------|
| Particles >4µm | ASTM D7647 >10000 | ▲ 108185 | --- | ▲ 81965 |
| Particles >6µm | ASTM D7647 >2500 | ▲ 7777 | --- | ▲ 8206 |
| Particles >14µm | ASTM D7647 >640 | 99 | --- | 135 |
| Particles >21µm | ASTM D7647 >160 | 12 | --- | 27 |
| Particles >38µm | ASTM D7647 >40 | 0 | --- | 0 |
| Particles >71µm | ASTM D7647 >10 | 0 | --- | 0 |
| Oil Cleanliness | ISO 4406 (c) >20/18/16 | ▲ 24/20/14 | --- | ▲ 24/20/14 |

FLUID DEGRADATION

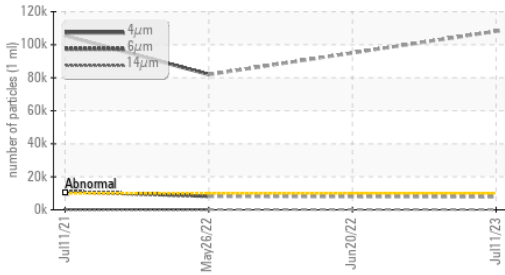
| method | limit/base | current | history1 | history2 | |
|------------------|------------|------------|-------------|----------|------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.43 | 0.46 | 1.00 |

OIL ANALYSIS REPORT

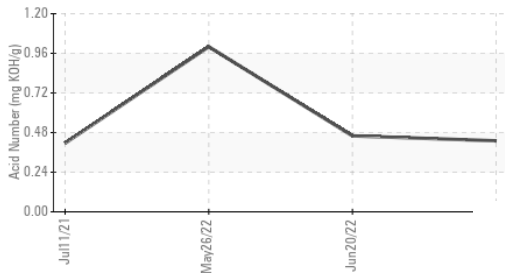
▲ Particle Trend



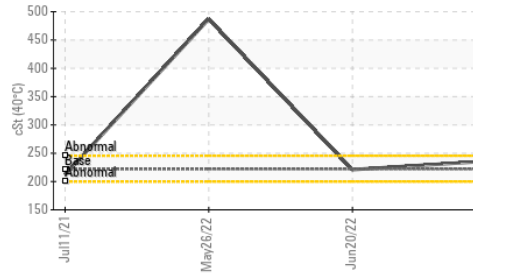
▲ Particle Trend



Acid Number



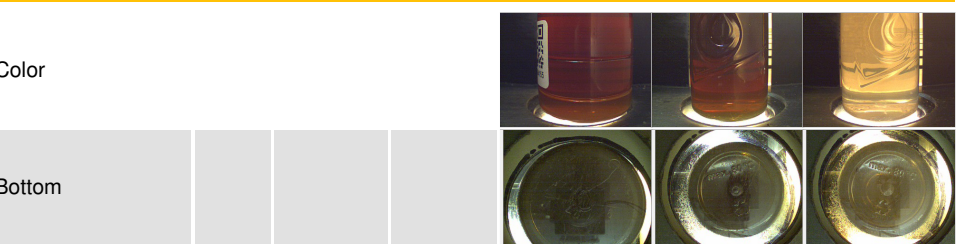
Viscosity @ 40°C



| 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 | >0.2 | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

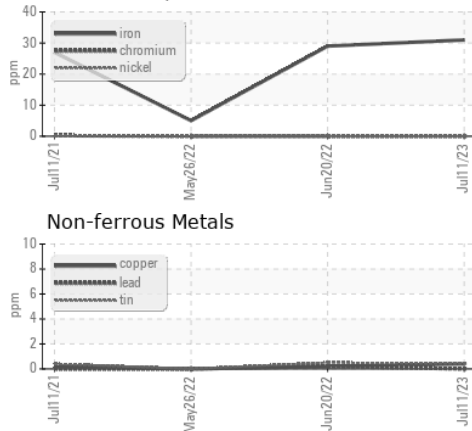
| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|---------------|------------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 222 | 237 | ▲ 221 | 487 |

SAMPLE IMAGES

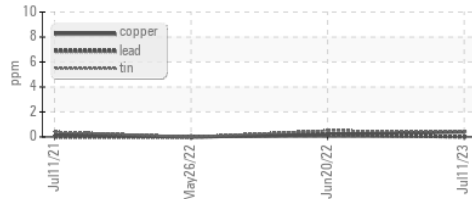


GRAPHS

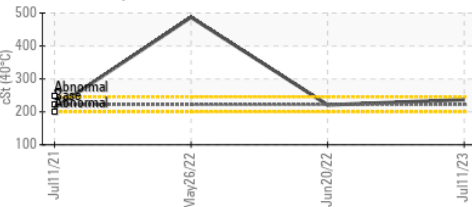
Ferrous Alloys



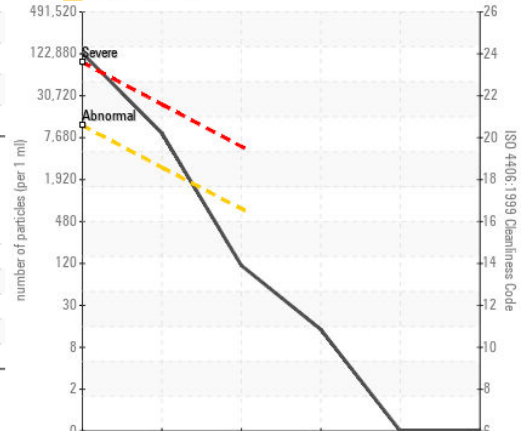
Non-ferrous Metals



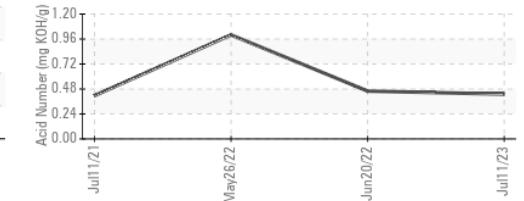
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0094155 **Received** : 18 Jul 2023
Lab Number : 05901277 **Diagnosed** : 20 Jul 2023
Unique Number : 10562633 **Diagnostician** : Don Baldrige

KraftHeinz - New Ulm - Plant 8302
 2525 S BRIDGE STREET
 NEW ULM, MN
 US 56073
 Contact: RYAN SCHMID
 ryan.schmid@kraftheinz.com
 T: (507)568-0338
 F: (507)354-7927

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)