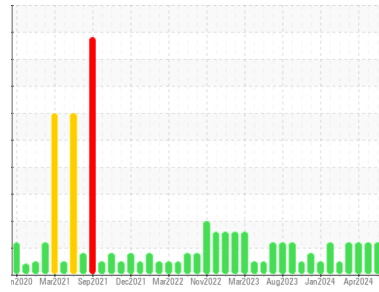


OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
NAT CUTS [98949972]
 Machine Id
LINE 1 CUBER
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

Contamination

There is a moderate 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 | | | PCA0124896 | PCA0124895 | PCA0117991 |
| Sample Date | Client Info | | | 24 May 2024 | 20 May 2024 | 12 Apr 2024 |
| Machine Age | days | Client Info | | 0 | 0 | 0 |
| Oil Age | days | Client Info | | 0 | 0 | 0 |
| Oil Changed | Client Info | | | N/A | N/A | N/A |
| Sample Status | | | | ATTENTION | ABNORMAL | ATTENTION |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---------------|-----------|--------|------------|------------|----------|----------|
| Water | WC Method | | >0.05 | NEG | NEG | NEG |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m | >20 | 0 | <1 | 9 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | <1 | 2 |
| Nickel | ppm | ASTM D5185m | >20 | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 2 | 4 | 2 |
| Lead | ppm | ASTM D5185m | >20 | 0 | 0 | 1 |
| Copper | ppm | ASTM D5185m | >20 | <1 | <1 | 17 |
| Tin | ppm | ASTM D5185m | >20 | <1 | <1 | 1 |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | <1 |

| ADDITIVES | | 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 | <1 |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | 25 | <1 | <1 | <1 |
| Calcium | ppm | ASTM D5185m | 200 | 1 | 1 | 6 |
| Phosphorus | ppm | ASTM D5185m | 300 | 243 | ▲ 35 | 343 |
| Zinc | ppm | ASTM D5185m | 370 | 4 | ▲ 2 | 43 |
| Sulfur | ppm | ASTM D5185m | 2500 | 726 | ▲ 58 | 863 |

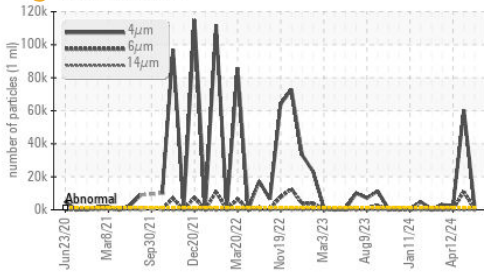
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m | >15 | 2 | 1 | 5 |
| Sodium | ppm | ASTM D5185m | | 11 | 8 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | <1 | 2 | 1 |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|-------------------|--|--------------|------------|-------------------|------------|------------|
| Particles >4µm | | ASTM D7647 | >1300 | ● 2346 | ▲ 60479 | ● 2455 |
| Particles >6µm | | ASTM D7647 | >320 | ● 577 | ▲ 10890 | ● 415 |
| Particles >14µm | | ASTM D7647 | >80 | 19 | 67 | 43 |
| Particles >21µm | | ASTM D7647 | >20 | 1 | 6 | 6 |
| Particles >38µm | | ASTM D7647 | >4 | 0 | 0 | 0 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >17/15/13 | ● 18/16/11 | ▲ 23/21/13 | ● 18/16/13 |

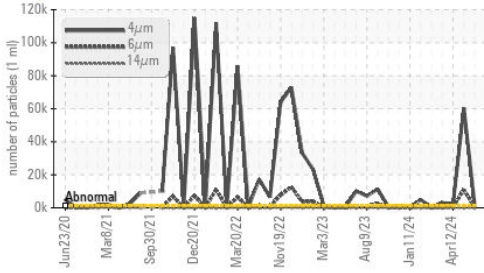
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.57 | 0.28 | 0.28 | 0.20 |

OIL ANALYSIS REPORT

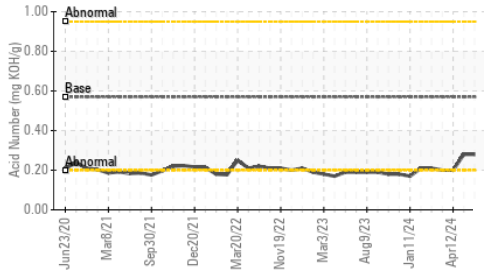
Particle Trend



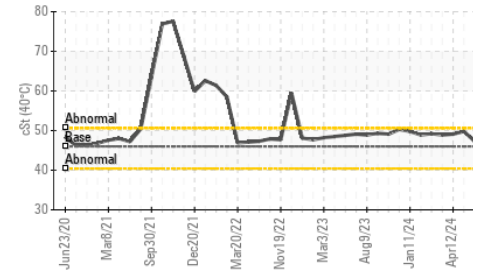
Particle Trend



Acid Number



Viscosity @ 40°C



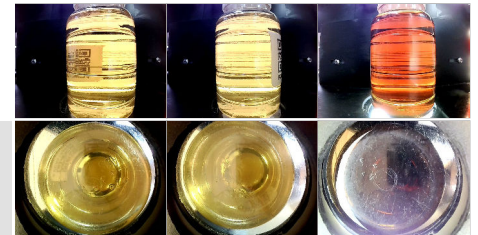
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | 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 | >0.05 | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 46 | 47.3 | 49.8 |

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

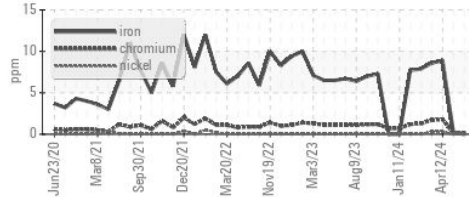
Color

Bottom

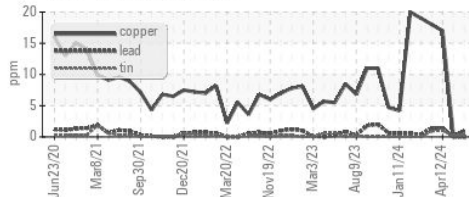


GRAPHS

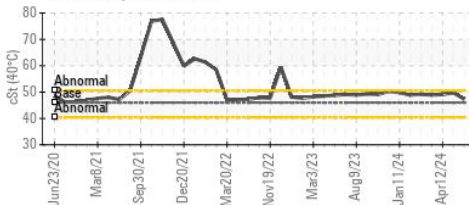
Ferrous Alloys



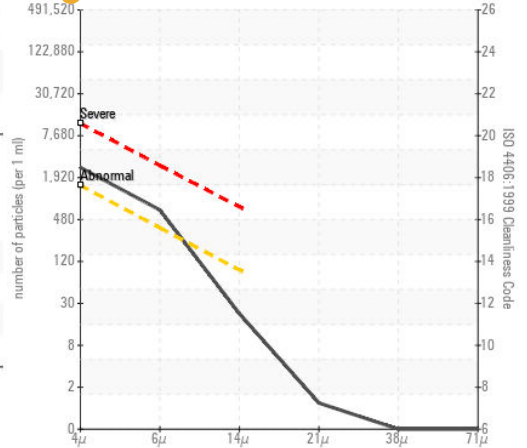
Non-ferrous Metals



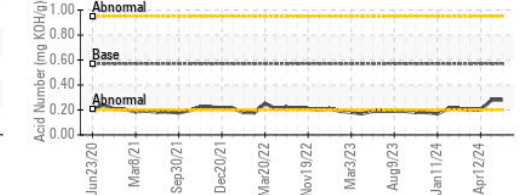
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0124896
Lab Number : 06199094
Unique Number : 11061217
Test Package : IND 2

Received : 04 Jun 2024
Tested : 06 Jun 2024
Diagnosed : 06 Jun 2024 - Jonathan Hester

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: