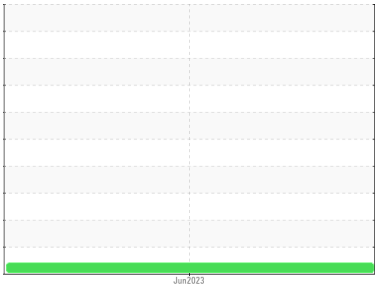
OIL DIAGNOSTICS

# PROBLEM SUMMARY

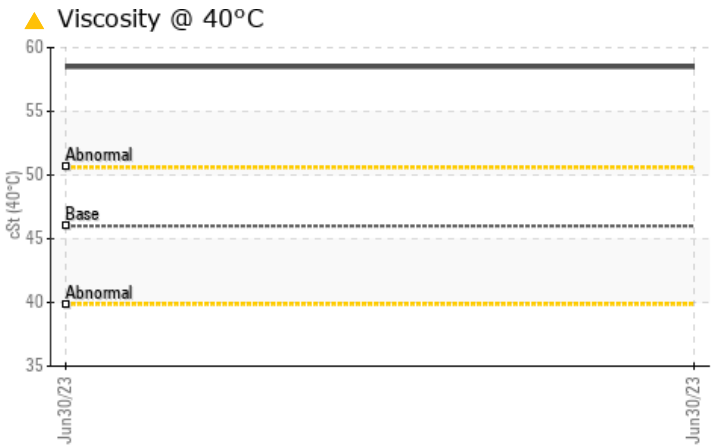
Sample Rating Trend




**VISCOSITY**

Area
## PASTA [97953665]
Machine Id
## D PRESS FOR EXTRUDER AUGER
Component
**Hydraulic System**
Fluid
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

## COMPONENT CONDITION SUMMARY




## RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

| | | | | | | |
|---|---|---|---|---|---|---|
| Sample Status | | | | **ATTENTION** | --- | --- |
| Visc @ 40°C | cSt | ASTM D445 | 46 | ▲ **58.5** | --- | --- |

**Customer Id:** KRASPRMO
**Sample No.:** PCA0083730
**Lab Number:** 05902250
**Test Package:** IND 2

*To manage this report scan the QR code*

*To discuss the diagnosis or test data:*
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

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

## RECOMMENDED ACTIONS

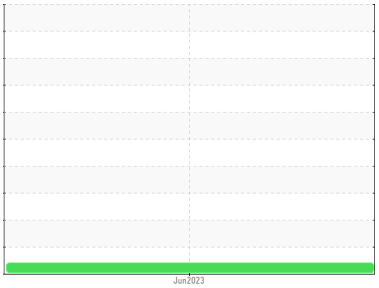
*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

OIL DIAGNOSTICS

# OIL ANALYSIS REPORT

Sample Rating Trend




**VISCOSITY**

Area
## PASTA [97953665]
Machine Id
## D PRESS FOR EXTRUDER AUGER
Component
**Hydraulic System**
Fluid
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

## DIAGNOSIS

**Recommendation**

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

**Wear**

All component wear rates are normal.

**Contamination**

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

**Fluid Condition**

The oil viscosity is higher than normal. Confirm oil type. The AN level is acceptable for this fluid.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **PCA0083730** | --- | --- |
| Sample Date | | Client Info | | **30 Jun 2023** | --- | --- |
| Machine Age | hrs | Client Info | | **0** | --- | --- |
| Oil Age | hrs | Client Info | | **0** | --- | --- |
| Oil Changed | | Client Info | | **Changed** | --- | --- |
| Sample Status | | | | **ATTENTION** | --- | --- |

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

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | 5 | **0** | --- | --- |
| Barium | ppm | ASTM D5185m | 5 | **0** | --- | --- |
| Molybdenum | ppm | ASTM D5185m | 5 | **0** | --- | --- |
| Manganese | ppm | ASTM D5185m | | **0** | --- | --- |
| Magnesium | ppm | ASTM D5185m | 25 | **0** | --- | --- |
| Calcium | ppm | ASTM D5185m | 200 | **2** | --- | --- |
| Phosphorus | ppm | ASTM D5185m | 300 | **514** | --- | --- |
| Zinc | ppm | ASTM D5185m | 370 | **27** | --- | --- |
| Sulfur | ppm | ASTM D5185m | 2500 | **1376** | --- | --- |

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

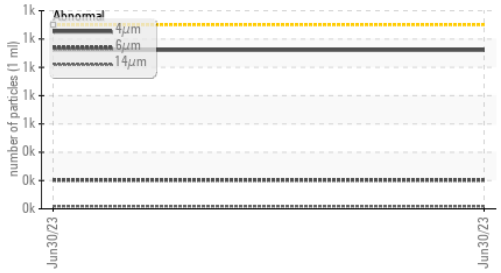
| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | >1300 | **1122** | --- | --- |
| Particles >6µm | | ASTM D7647 | >320 | **203** | --- | --- |
| Particles >14µm | | ASTM D7647 | >80 | **18** | --- | --- |
| Particles >21µm | | ASTM D7647 | >20 | **7** | --- | --- |
| Particles >38µm | | ASTM D7647 | >4 | **0** | --- | --- |
| Particles >71µm | | ASTM D7647 | >3 | **0** | --- | --- |
| Oil Cleanliness | | ISO 4406 (c) | >17/15/13 | **17/15/11** | --- | --- |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.57 | **0.40** | --- | --- |

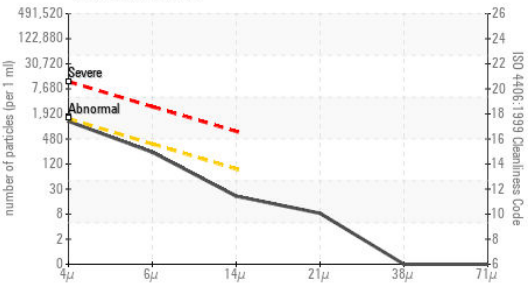
# OIL ANALYSIS REPORT

OIL DIAGNOSTICS

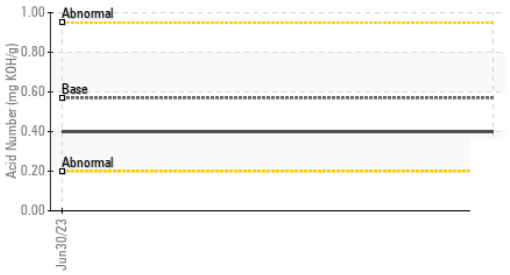
Particle Trend



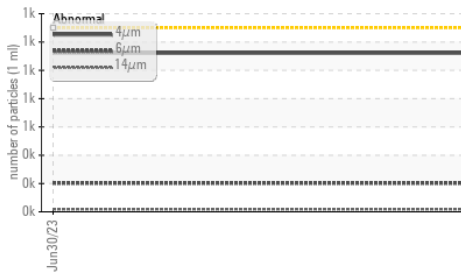

Particle Count




Acid Number

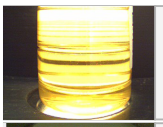
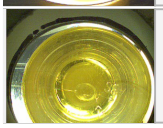



Particle Trend




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

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 46 | ▲ **58.5** | --- | --- |

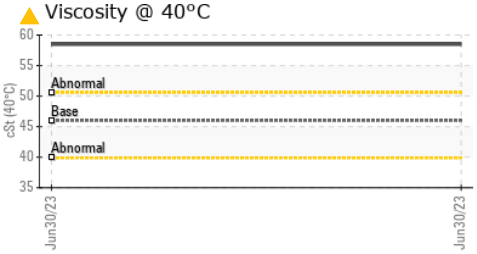
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  | *no image* | *no image* |
| Bottom | | |  | *no image* | *no image* |

## GRAPHS

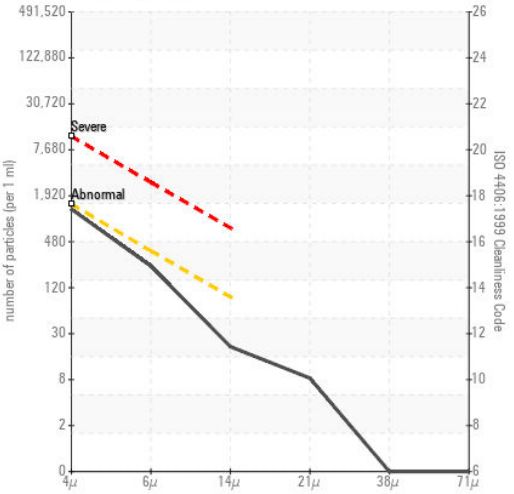
Ferrous Alloys


Non-ferrous Metals


▲ Viscosity @ 40°C




Particle Count




Acid Number


ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : PCA0083730
**Lab Number** : 05902250
**Unique Number** : 10563606
**Test Package** : IND 2

**Received** : 19 Jul 2023
**Diagnosed** : 25 Jul 2023
**Diagnostician** : Doug Bogart

**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: