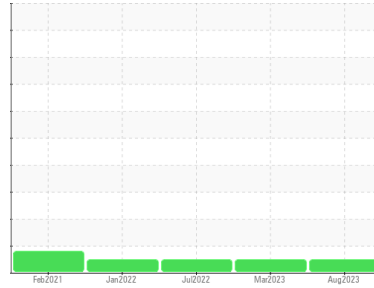




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
BC-3 (S/N 3211311)
 Component
Refrigeration Compressor
 Fluid
USPI 1009-68 SC (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a trace of moisture present in the oil. The amount and size of particulates present in the system are acceptable.

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 | USP250322 | USP246825 | USP241175 |
| Sample Date | Client Info | 14 Aug 2023 | 06 Mar 2023 | 20 Jul 2022 |
| Machine Age | hrs | 71333 | 69245 | 66321 |
| Oil Age | hrs | 8406 | 6315 | 3393 |
| Oil Changed | Client Info | N/A | N/A | Not Changd |
| Sample Status | | NORMAL | NORMAL | NORMAL |

WEAR METALS

| method | limit/base | current | history1 | history2 | |
|----------|------------|----------------|--------------|----------|-----|
| Iron | ppm | ASTM D5185m >8 | <1 | <1 | 1 |
| Chromium | ppm | ASTM D5185m >2 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >3 | 0 | <1 | <1 |
| Lead | ppm | ASTM D5185m >2 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185m >8 | 0 | 0 | 0 |
| Tin | ppm | ASTM D5185m >4 | 0 | 0 | 0 |
| Antimony | ppm | ASTM D5185m | --- | --- | --- |
| Vanadium | ppm | ASTM D5185m | <1 | <1 | 0 |
| Cadmium | ppm | ASTM D5185m | 0 | 0 | 0 |

ADDITIVES

| method | limit/base | current | history1 | history2 | |
|------------|------------|----------------|-----------|----------|----|
| Boron | ppm | ASTM D5185m | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | 0 | <1 | 0 |
| Magnesium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Calcium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | 0 | 0 | <1 |
| Zinc | ppm | ASTM D5185m | 0 | 0 | 0 |
| Sulfur | ppm | ASTM D5185m 50 | 70 | 0 | 52 |

CONTAMINANTS

| method | limit/base | current | history1 | history2 | |
|-----------|------------|------------------|--------------|----------|-------|
| Silicon | ppm | ASTM D5185m >15 | 1 | 2 | 1 |
| Sodium | ppm | ASTM D5185m | <1 | 0 | 0 |
| Potassium | ppm | ASTM D5185m >20 | 0 | 0 | <1 |
| Water | % | ASTM D6304 >0.01 | 0.010 | 0.004 | 0.009 |
| ppm Water | ppm | ASTM D6304 >100 | 104.9 | 47.2 | 90.0 |

FLUID CLEANLINESS

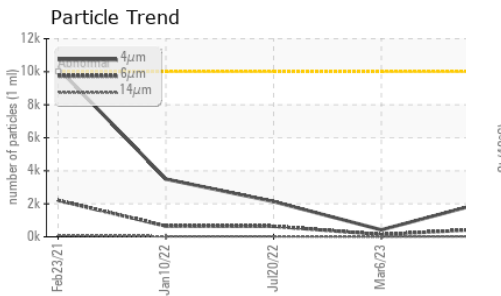
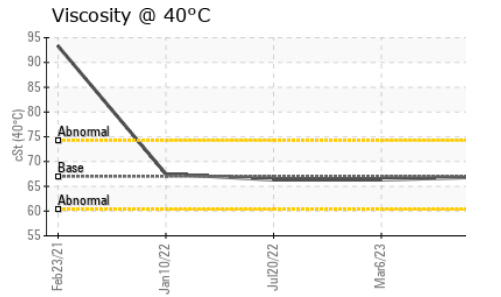
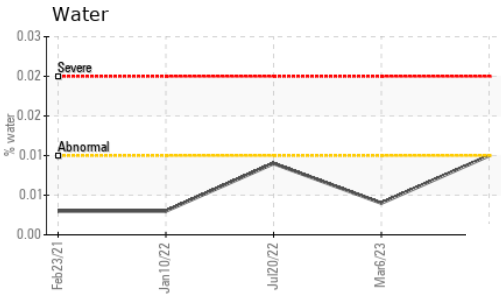
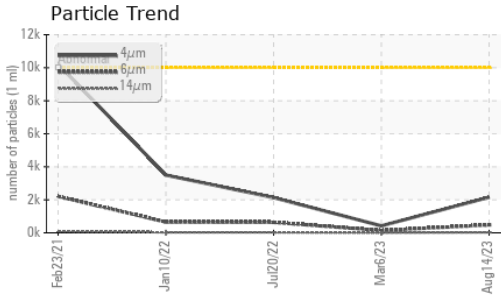
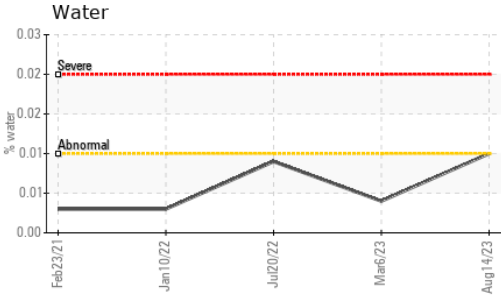
| method | limit/base | current | history1 | history2 |
|-----------------|------------------------|-----------------|----------|----------|
| Particles >4µm | ASTM D7647 >10000 | 2157 | 421 | 2134 |
| Particles >6µm | ASTM D7647 >2500 | 478 | 138 | 635 |
| Particles >14µm | ASTM D7647 >640 | 27 | 11 | 27 |
| Particles >21µm | ASTM D7647 >160 | 9 | 2 | 6 |
| Particles >38µm | ASTM D7647 >40 | 0 | 0 | 0 |
| Particles >71µm | ASTM D7647 >10 | 0 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) >20/18/16 | 18/16/12 | 16/14/11 | 18/16/12 |

FLUID DEGRADATION

| method | limit/base | current | history1 | history2 | |
|------------------|------------|-----------------|--------------|----------|-------|
| Acid Number (AN) | mg KOH/g | ASTM D974 0.005 | 0.013 | 0.014 | 0.015 |



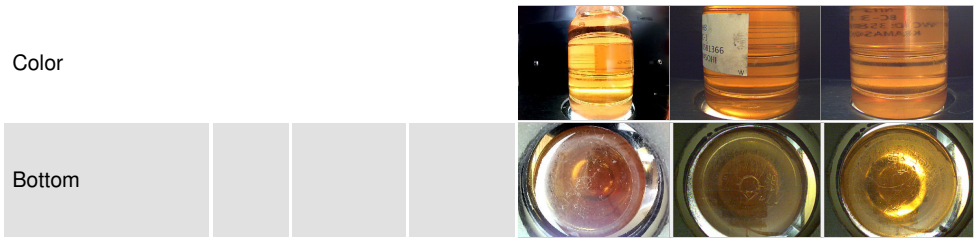
OIL ANALYSIS REPORT



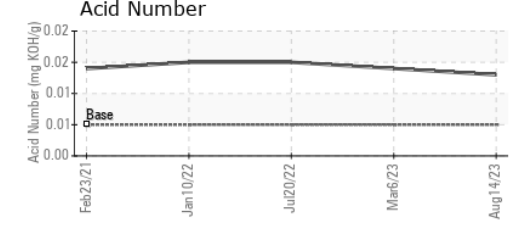
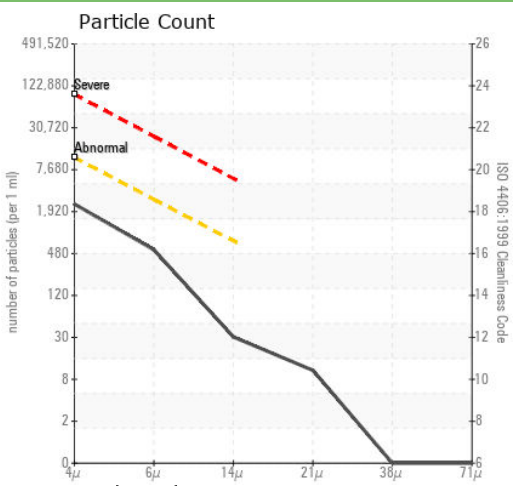
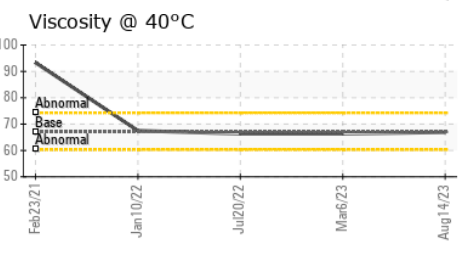
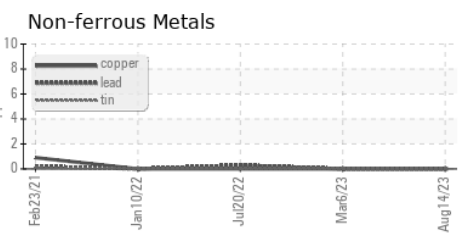
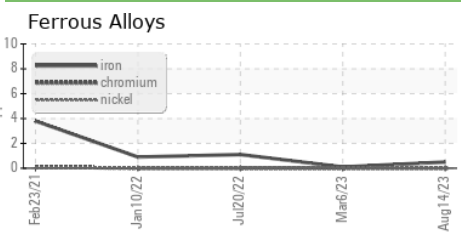
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | 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 | >0.01 | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|--------------|-------------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 67 | 66.9 | 66.3 | 66.3 |

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP250322 **Received** : 21 Aug 2023
Lab Number : **05929657** **Diagnosed** : 22 Aug 2023
Unique Number : 10609604 **Diagnostician** : Doug Bogart
Test Package : IND 2

KraftHeinz - Massillon - Plant 8355 USP
 1301 OBERLIN ROAD SW
 MASSILLON, OH
 US 44647
 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: