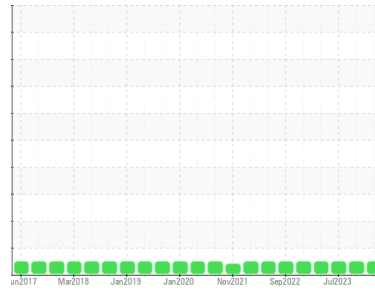




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**KR-GF-100313 RPE6-C2**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**USPI 1009-68 SC (50 GAL)**

## DIAGNOSIS

### Recommendation

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 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 |             |            | <b>USP0005264</b>  | USP0001144  | USP249339   |
| Sample Date        | Client Info |             |            | <b>10 Jan 2024</b> | 15 Oct 2023 | 10 Jul 2023 |
| Machine Age        | hrs         | Client Info |            | <b>0</b>           | 0           | 0           |
| Oil Age            | hrs         | Client Info |            | <b>0</b>           | 0           | 0           |
| Oil Changed        | Client Info |             |            | <b>N/A</b>         | N/A         | N/A         |
| Sample Status      |             |             |            | <b>NORMAL</b>      | NORMAL      | NORMAL      |

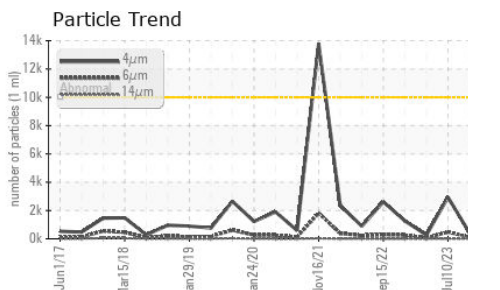
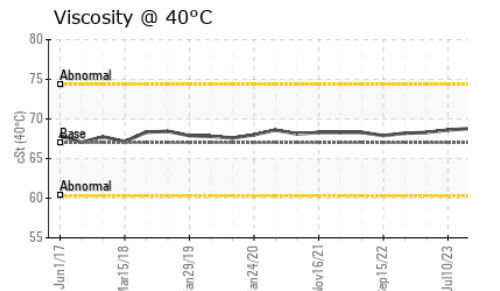
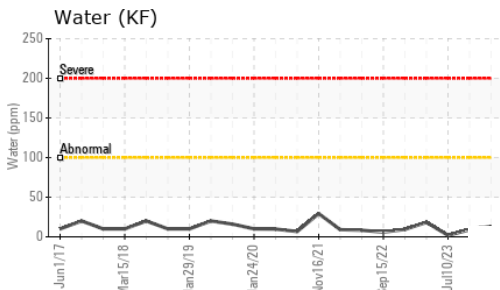
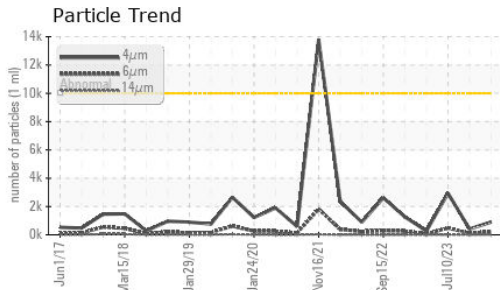
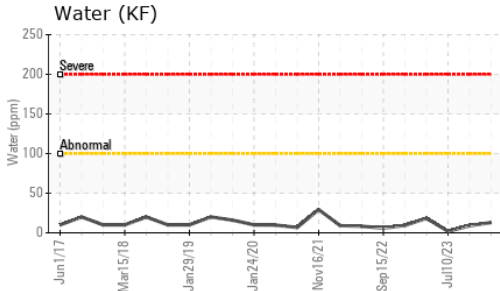
| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >8         | <b>&lt;1</b> | 0        | 0        |
| Chromium    | ppm | ASTM D5185m | >2    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

| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Barium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Manganese  | ppm | ASTM D5185m |            | <b>0</b>     | 0        | <1       |
| Magnesium  | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Calcium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Phosphorus | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Zinc       | ppm | ASTM D5185m |            | <b>0</b>     | <1       | 0        |
| Sulfur     | ppm | ASTM D5185m | 50         | <b>0</b>     | 0        | 7        |

| CONTAMINANTS |     | method      | limit/base | current      | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >15        | <b>&lt;1</b> | 0        | <1       |
| Sodium       | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Potassium    | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | <1       | <1       |
| Water        | %   | ASTM D6304  | >0.01      | <b>0.001</b> | 0.001    | 0.001    |
| ppm Water    | ppm | ASTM D6304  | >100       | <b>13</b>    | 8.9      | 1.9      |

| FLUID CLEANLINESS |  | method       | limit/base | current         | history1 | history2 |
|-------------------|--|--------------|------------|-----------------|----------|----------|
| Particles >4µm    |  | ASTM D7647   | >10000     | <b>903</b>      | 411      | 2935     |
| Particles >6µm    |  | ASTM D7647   | >2500      | <b>236</b>      | 109      | 481      |
| Particles >14µm   |  | ASTM D7647   | >640       | <b>20</b>       | 8        | 13       |
| Particles >21µm   |  | ASTM D7647   | >160       | <b>4</b>        | 2        | 3        |
| Particles >38µm   |  | ASTM D7647   | >40        | <b>0</b>        | 0        | 0        |
| Particles >71µm   |  | ASTM D7647   | >10        | <b>0</b>        | 0        | 0        |
| Oil Cleanliness   |  | ISO 4406 (c) | >20/18/16  | <b>17/15/11</b> | 16/14/10 | 19/16/11 |

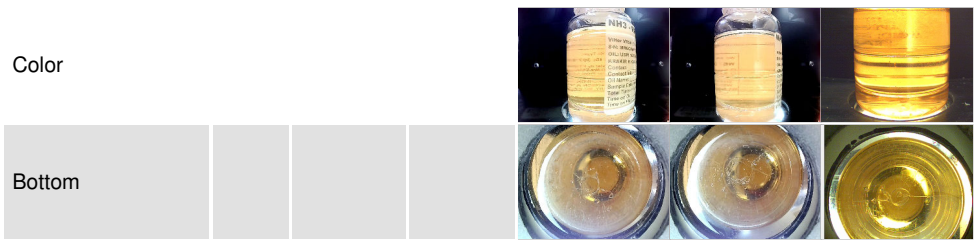
| FLUID DEGRADATION |          | method    | limit/base | current      | history1 | history2 |
|-------------------|----------|-----------|------------|--------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D974 | 0.005      | <b>0.014</b> | 0.012    | 0.014    |



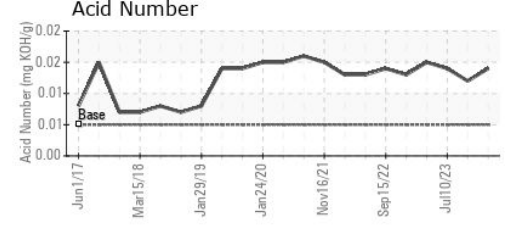
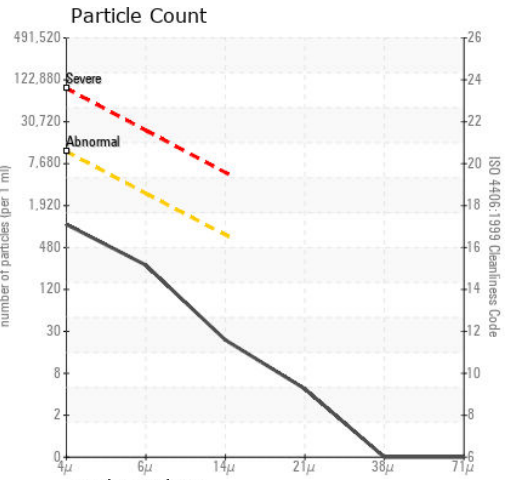
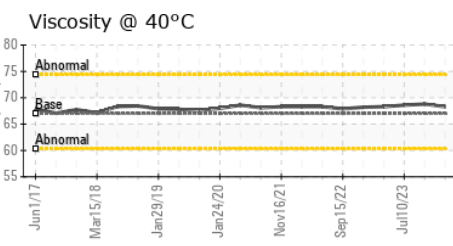
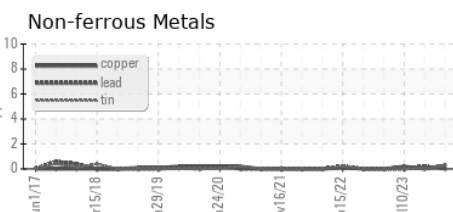
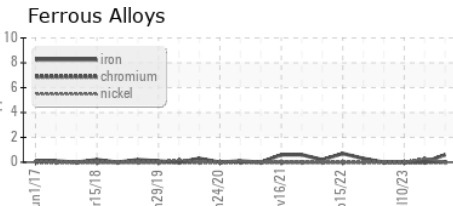
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| 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 | 68.3    | 68.8     | 68.6     |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP0005264 **Received** : 11 Jan 2024  
**Lab Number** : 06058148 **Diagnosed** : 12 Jan 2024  
**Unique Number** : 10829530 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**KraftHeinz - Kirksville - Plant 8333 USP**  
 2504 INDUSTRIAL RD  
 KIRKSVILLE, MO  
 US 63501  
 Contact: THOMAS BARRETT  
 thomas.barrett@kraftheinz.com  
 T:  
 F:

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)