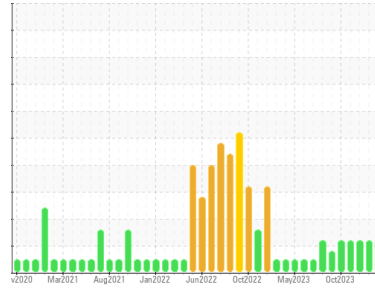


Area
MIX ROOM C [98725356]
 Machine Id
KR-GR-003111 - WEST DUMPER (S/N MIX C - 11513059)
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 68 (--- GAL)



DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. (Customer Sample Comment: 98725356)

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 | PCA0114839 | PCA0111175 | PCA0051936 |
| Sample Date | Client Info | 02 Jan 2024 | 20 Dec 2023 | 18 Nov 2023 |
| Machine Age | hrs | 0 | 0 | 0 |
| Oil Age | hrs | 0 | 0 | 0 |
| Oil Changed | Client Info | N/A | Not Changd | N/A |
| Sample Status | | ABNORMAL | ABNORMAL | ABNORMAL |

CONTAMINATION

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

WEAR METALS

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

ADDITIVES

| method | limit/base | current | history1 | history2 | | |
|------------|------------|-------------|----------|--------------|-----|-----|
| Boron | ppm | ASTM D5185m | 5 | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | 5 | 10 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 5 | <1 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Magnesium | ppm | ASTM D5185m | 25 | <1 | 0 | 0 |
| Calcium | ppm | ASTM D5185m | 200 | 1 | 0 | <1 |
| Phosphorus | ppm | ASTM D5185m | 300 | 414 | 379 | 411 |
| Zinc | ppm | ASTM D5185m | 370 | 0 | 0 | 0 |
| Sulfur | ppm | ASTM D5185m | 2500 | 465 | 259 | 470 |

CONTAMINANTS

| method | limit/base | current | history1 | history2 | | |
|-----------|------------|-------------|----------|----------|---|---|
| Silicon | ppm | ASTM D5185m | >15 | 1 | 1 | 2 |
| Sodium | ppm | ASTM D5185m | | 0 | 4 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 2 | 0 |

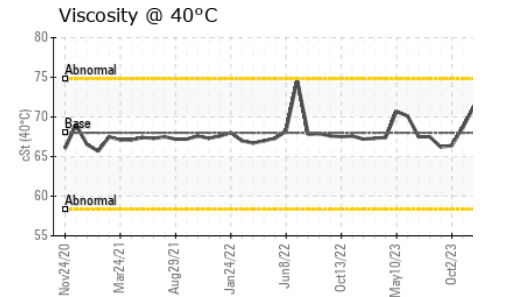
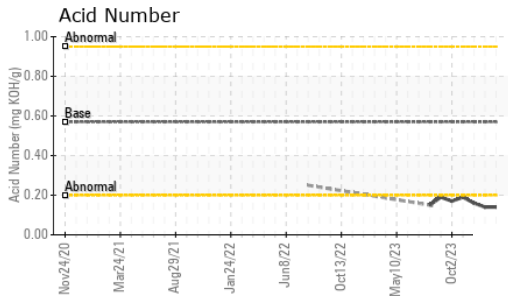
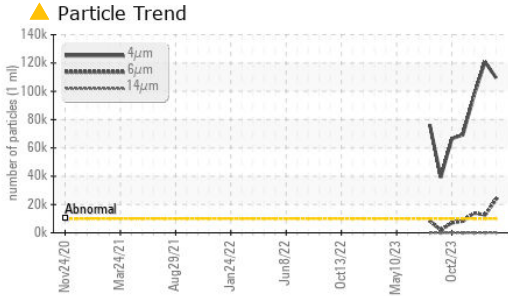
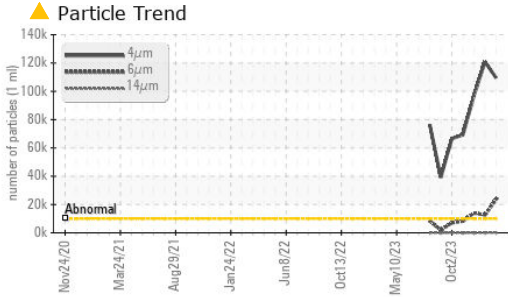
FLUID CLEANLINESS

| method | limit/base | current | history1 | history2 | |
|-----------------|--------------|-----------|-------------------|------------|------------|
| Particles >4µm | ASTM D7647 | >10000 | ▲ 109504 | ▲ 120844 | ▲ 96996 |
| Particles >6µm | ASTM D7647 | >2500 | ▲ 23657 | ▲ 12629 | ▲ 13941 |
| Particles >14µm | ASTM D7647 | >640 | 156 | 150 | 53 |
| Particles >21µm | ASTM D7647 | >160 | 19 | 23 | 6 |
| Particles >38µm | ASTM D7647 | >40 | 0 | 1 | 1 |
| Particles >71µm | ASTM D7647 | >10 | 0 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >20/18/16 | ▲ 24/22/14 | ▲ 24/21/14 | ▲ 24/21/13 |

FLUID DEGRADATION

| method | limit/base | current | history1 | history2 | | |
|------------------|------------|------------|----------|-------------|------|------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.57 | 0.14 | 0.14 | 0.16 |

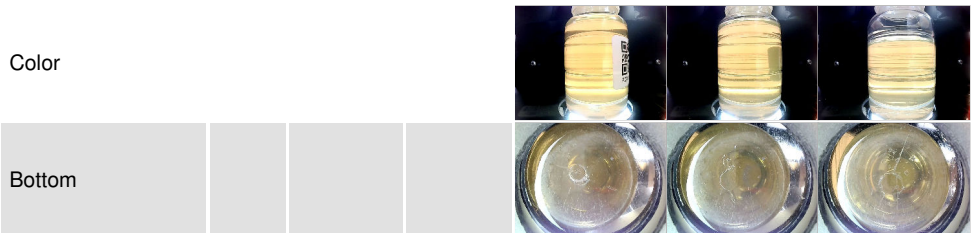
OIL ANALYSIS REPORT



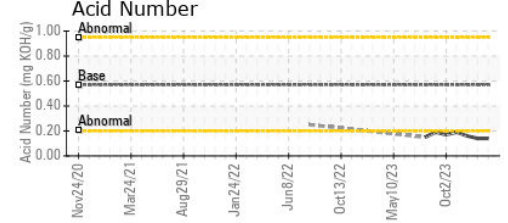
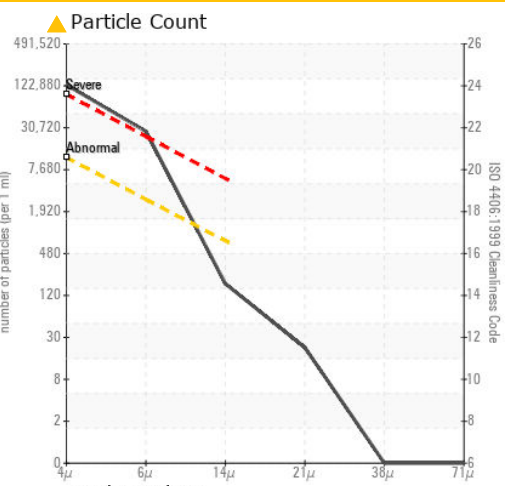
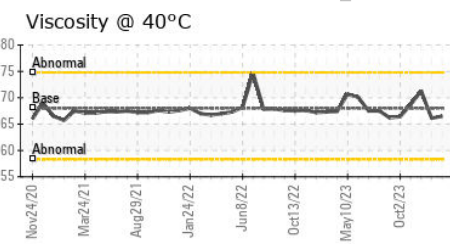
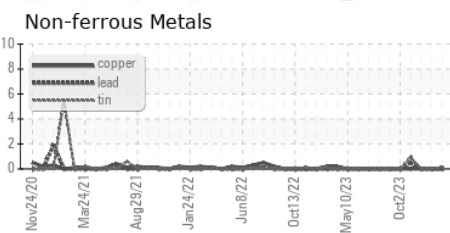
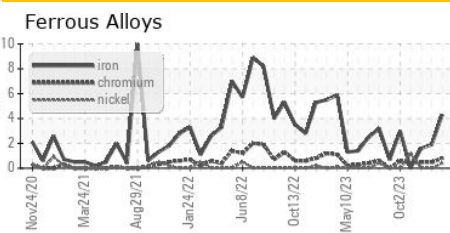
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE |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

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|--------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 68 | 66.5 | 66.1 | 71.3 |

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0114839 **Received** : 05 Jan 2024
Lab Number : 06051847 **Diagnosed** : 08 Jan 2024
Unique Number : 10817796 **Diagnostician** : Angela Borella
Test Package : IND 2

KraftHeinz - Kirksville - Plant 8333 PCA
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 KIRKSVILLE, MO
 US 63501
 Contact: WALLACE WARD
 wallace.ward@kraftheinzcompany.com
 T: (660)627-1031
 F: (660)627-5887

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)