



OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id

COOLING TOWER 2-1 (S/N 029945)

Component

Gearbox

Fluid

MOBIL DTE OIL HEAVY (2 GAL)

DIAGNOSIS

▲ Recommendation

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

▲ Wear

The iron level is abnormal. All other 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 | | WC0867568 | --- | --- |
| Sample Date | Client Info | | 01 Apr 2024 | --- | --- |
| Machine Age | hrs | Client Info | 0 | --- | --- |
| Oil Age | hrs | Client Info | 0 | --- | --- |
| Oil Changed | Client Info | | N/A | --- | --- |
| Sample Status | | | ABNORMAL | --- | --- |

| WEAR METALS | method | limit/base | current | history1 | history2 |
|-------------|------------|-----------------|--------------|----------|----------|
| PQ | ASTM D8184 | | 15 | --- | --- |
| Iron | ppm | ASTM D5185m >30 | ▲ 51 | --- | --- |
| Chromium | ppm | ASTM D5185m >4 | 0 | --- | --- |
| Nickel | ppm | ASTM D5185m >5 | 0 | --- | --- |
| Titanium | ppm | ASTM D5185m | 0 | --- | --- |
| Silver | ppm | ASTM D5185m >5 | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185m >8 | 2 | --- | --- |
| Lead | ppm | ASTM D5185m >10 | 0 | --- | --- |
| Copper | ppm | ASTM D5185m >8 | 3 | --- | --- |
| Tin | ppm | ASTM D5185m >4 | <1 | --- | --- |
| Vanadium | ppm | ASTM D5185m | 0 | --- | --- |
| Cadmium | ppm | ASTM D5185m | 0 | --- | --- |

| ADDITIVES | method | limit/base | current | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | 2 | --- | --- |
| Barium | ppm | ASTM D5185m | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185m | 0 | --- | --- |
| Manganese | ppm | ASTM D5185m | <1 | --- | --- |
| Magnesium | ppm | ASTM D5185m | <1 | --- | --- |
| Calcium | ppm | ASTM D5185m | 3 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | 1213 | --- | --- |
| Zinc | ppm | ASTM D5185m | 0 | --- | --- |
| Sulfur | ppm | ASTM D5185m | 6501 | --- | --- |

| CONTAMINANTS | method | limit/base | current | history1 | history2 |
|--------------|--------|------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >10 | 3 | --- | --- |
| Sodium | ppm | ASTM D5185m | 3 | --- | --- |
| Potassium | ppm | ASTM D5185m >20 | 0 | --- | --- |
| Water | % | ASTM D6304 >0.2 | 0.019 | --- | --- |
| ppm Water | ppm | ASTM D6304 >2000 | 195 | --- | --- |

| FLUID CLEANLINESS | method | limit/base | current | history1 | history2 |
|-------------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm | ASTM D7647 | >20000 | 13217 | --- | --- |
| Particles >6µm | ASTM D7647 | >5000 | 502 | --- | --- |
| Particles >14µm | ASTM D7647 | >640 | 15 | --- | --- |
| Particles >21µm | ASTM D7647 | >160 | 3 | --- | --- |
| Particles >38µm | ASTM D7647 | >40 | 0 | --- | --- |
| Particles >71µm | ASTM D7647 | >10 | 0 | --- | --- |
| Oil Cleanliness | ISO 4406 (c) | >21/19/16 | 21/16/11 | --- | --- |

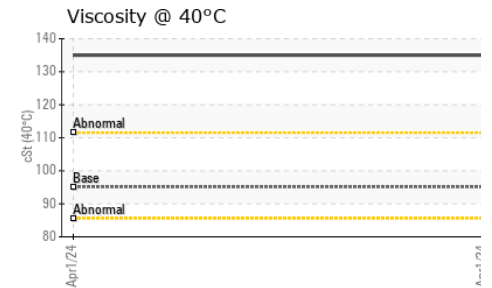
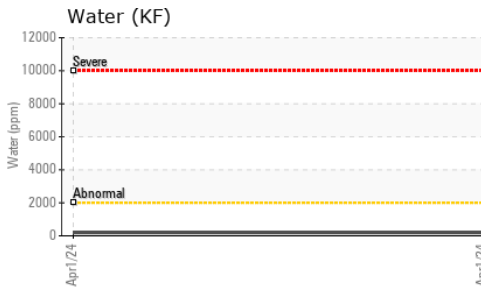
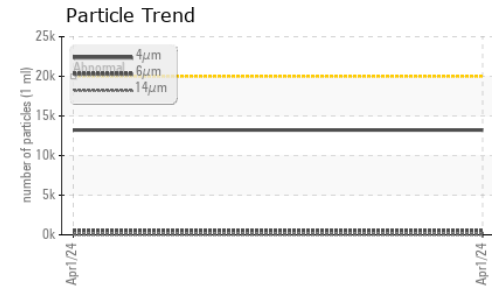
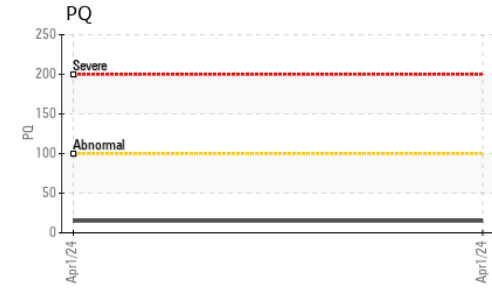
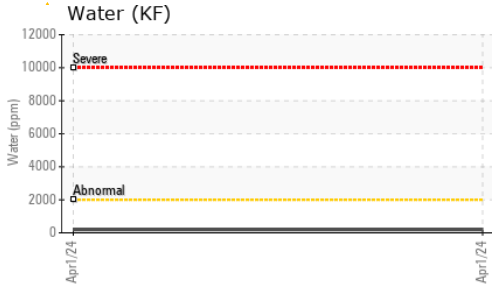
| FLUID DEGRADATION | method | limit/base | current | history1 | history2 |
|-------------------|--------|------------|---------|----------|----------|
|-------------------|--------|------------|---------|----------|----------|

Acid Number (AN) mg KOH/g ASTM D8045

2.06



OIL ANALYSIS REPORT



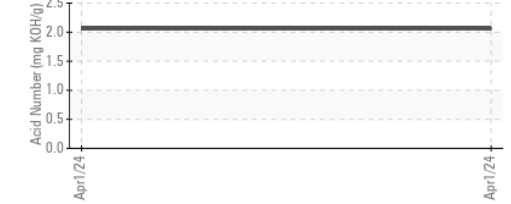
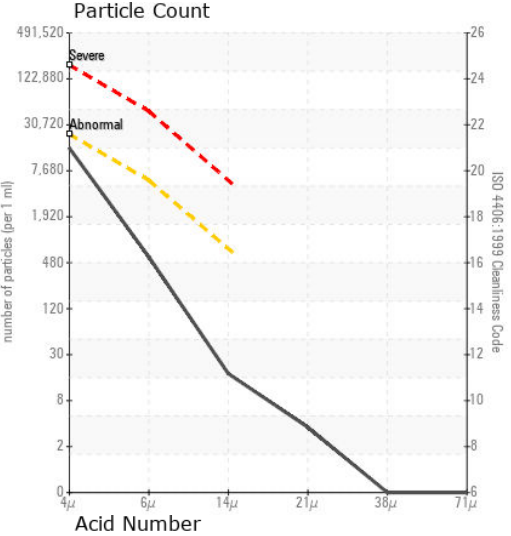
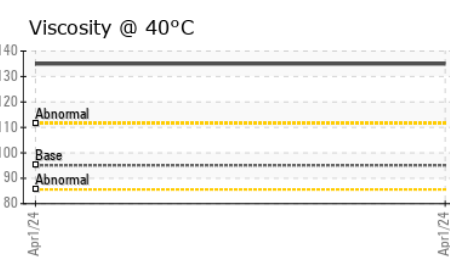
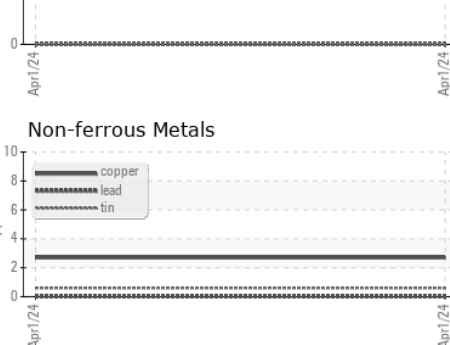
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- |
| Precipitate | scalar | *Visual | NONE | NONE | --- |
| 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 | >0.2 | NEG | --- |
| Free Water | scalar | *Visual | | NEG | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 95.1 | 135 | --- |

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

| | | | |
|--------|--|----------|----------|
| Color | | no image | no image |
| Bottom | | no image | no image |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0867568

Lab Number : 06150324

Unique Number : 10980402

Test Package : PLANT

Received : 16 Apr 2024

Tested : 17 Apr 2024

Diagnosed : 18 Apr 2024 - Jonathan Hester

Kimberly-Clark - Paris

2466 FM 137

PARIS, TX

US 75460

Contact: TERRY BURCHINAL

terry.burchinal@kcc.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)