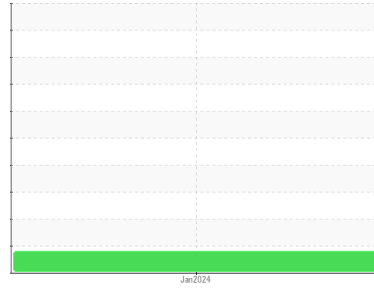




OIL ANALYSIS REPORT

Sample Rating Trend



SEDIMENT



Area
METRO
 Machine Id
METRO 25001
 Component
Rear Differential
 Fluid
{not provided} (--- GAL)

DIAGNOSIS

▲ Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

▲ Contamination

There is a moderate amount of visible silt present in the sample.

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 | | WC0934522 | --- | --- |
| Sample Date | Client Info | | 16 Jan 2024 | --- | --- |
| Machine Age | mls | Client Info | 6 | --- | --- |
| Oil Age | mls | Client Info | 0 | --- | --- |
| Oil Changed | Client Info | | N/A | --- | --- |
| Sample Status | | | ABNORMAL | --- | --- |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >500 | 40 | --- | --- |
| Chromium | ppm | ASTM D5185m >10 | <1 | --- | --- |
| Nickel | ppm | ASTM D5185m >10 | <1 | --- | --- |
| Titanium | ppm | ASTM D5185m | <1 | --- | --- |
| Silver | ppm | ASTM D5185m | <1 | --- | --- |
| Aluminum | ppm | ASTM D5185m >25 | 2 | --- | --- |
| Lead | ppm | ASTM D5185m >25 | <1 | --- | --- |
| Copper | ppm | ASTM D5185m >100 | <1 | --- | --- |
| Tin | ppm | ASTM D5185m >10 | <1 | --- | --- |
| Vanadium | ppm | ASTM D5185m | <1 | --- | --- |
| Cadmium | ppm | ASTM D5185m | <1 | --- | --- |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | 390 | --- | --- |
| Barium | ppm | ASTM D5185m | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185m | <1 | --- | --- |
| Manganese | ppm | ASTM D5185m | <1 | --- | --- |
| Magnesium | ppm | ASTM D5185m | 2 | --- | --- |
| Calcium | ppm | ASTM D5185m | 10 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | 1612 | --- | --- |
| Zinc | ppm | ASTM D5185m | 3 | --- | --- |
| Sulfur | ppm | ASTM D5185m | 30019 | --- | --- |

CONTAMINANTS

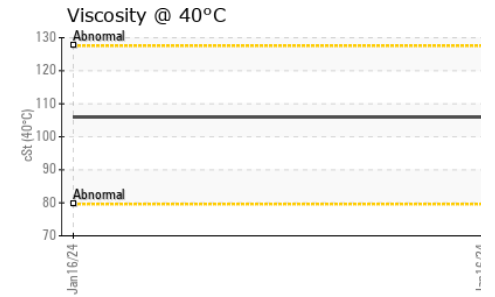
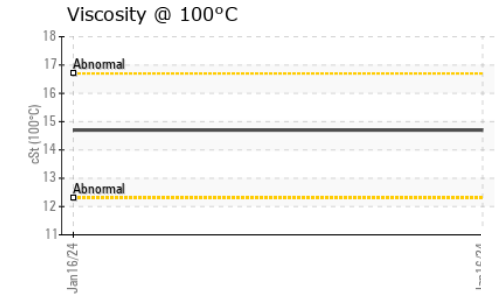
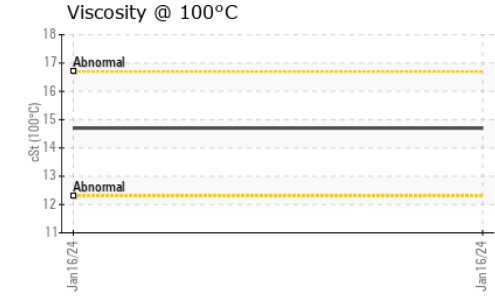
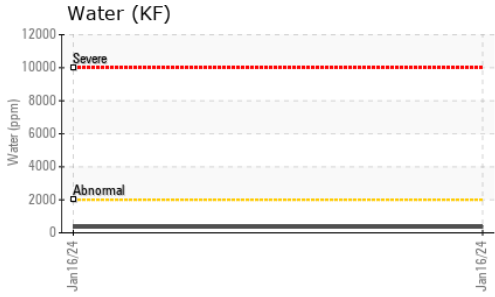
| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >75 | 5 | --- | --- |
| Sodium | ppm | ASTM D5185m | 2 | --- | --- |
| Potassium | ppm | ASTM D5185m >20 | 2 | --- | --- |
| Water | % | ASTM D6304 >.2 | 0.035 | --- | --- |
| ppm Water | ppm | ASTM D6304 >2000 | 354 | --- | --- |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 2.42 | --- | --- |



OIL ANALYSIS REPORT



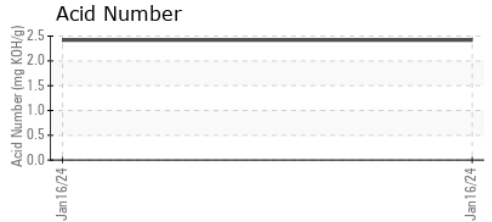
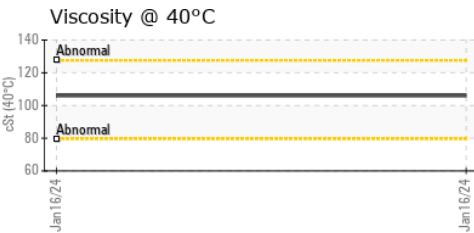
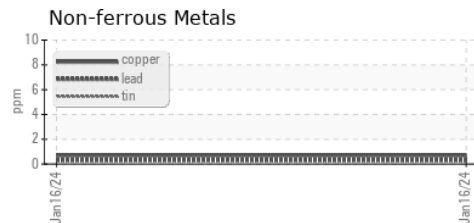
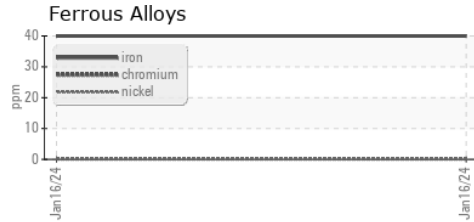
| VISUAL | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|----------|----------|-----|
| White Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Precipitate | scalar | *Visual | NONE | NONE | --- | --- |
| Silt | scalar | *Visual | NONE | ▲ MODER | --- | --- |
| 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 | >.2 | NEG | --- | --- |
| Free Water | scalar | *Visual | | NEG | --- | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|----------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 106 | --- | --- |
| Visc @ 100°C | cSt | ASTM D445 | 14.7 | --- | --- |
| Viscosity Index (VI) | Scale | ASTM D2270 | 143 | --- | --- |

SAMPLE IMAGES

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0934522 **Received** : 15 May 2024
Lab Number : **06180638** **Tested** : 18 May 2024
Unique Number : 11031964 **Diagnosed** : 18 May 2024 - Jonathan Hester
Test Package : MOB 2 (Additional Tests: KF, KV100, PrtCount, VI)

BASF - GIANNA CREDAROLI
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 US 10591
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 gianna.credaroli@basf.com

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)