

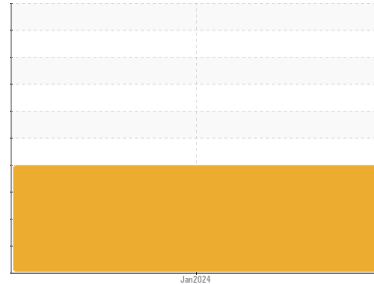


# OIL ANALYSIS REPORT

Sample Rating Trend

WEAR

Area  
**PLOGER**  
 Machine Id  
**9212 - PLOGER**  
 Component  
**Front Differential**  
 Fluid  
**{not provided} (--- GAL)**



## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component if applicable. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

Bearing and/or gear wear is indicated.

### Contamination

There is a high amount of particulates 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     | <b>WC0900852</b>   | ---      | ---      |
| Sample Date   | Client Info     | <b>03 Jan 2024</b> | ---      | ---      |
| Machine Age   | mls Client Info | <b>314792</b>      | ---      | ---      |
| Oil Age       | mls Client Info | <b>0</b>           | ---      | ---      |
| Oil Changed   | Client Info     | <b>N/A</b>         | ---      | ---      |
| Sample Status |                 | <b>ABNORMAL</b>    | ---      | ---      |

## WEAR METALS

| method                   | limit/base | current      | history1 | history2 |
|--------------------------|------------|--------------|----------|----------|
| Iron ppm ASTM D5185m     | >500       | <b>▲ 583</b> | ---      | ---      |
| Chromium ppm ASTM D5185m | >10        | <b>6</b>     | ---      | ---      |
| Nickel ppm ASTM D5185m   | >10        | <b>5</b>     | ---      | ---      |
| Titanium ppm ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Silver ppm ASTM D5185m   |            | <b>0</b>     | ---      | ---      |
| Aluminum ppm ASTM D5185m | >25        | <b>&lt;1</b> | ---      | ---      |
| Lead ppm ASTM D5185m     | >25        | <b>21</b>    | ---      | ---      |
| Copper ppm ASTM D5185m   | >100       | <b>▲ 159</b> | ---      | ---      |
| Tin ppm ASTM D5185m      | >10        | <b>▲ 17</b>  | ---      | ---      |
| Vanadium ppm ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Cadmium ppm ASTM D5185m  |            | <b>0</b>     | ---      | ---      |

## ADDITIVES

| method                     | limit/base | current      | history1 | history2 |
|----------------------------|------------|--------------|----------|----------|
| Boron ppm ASTM D5185m      |            | <b>56</b>    | ---      | ---      |
| Barium ppm ASTM D5185m     |            | <b>0</b>     | ---      | ---      |
| Molybdenum ppm ASTM D5185m |            | <b>1</b>     | ---      | ---      |
| Manganese ppm ASTM D5185m  |            | <b>14</b>    | ---      | ---      |
| Magnesium ppm ASTM D5185m  |            | <b>168</b>   | ---      | ---      |
| Calcium ppm ASTM D5185m    |            | <b>11</b>    | ---      | ---      |
| Phosphorus ppm ASTM D5185m |            | <b>1676</b>  | ---      | ---      |
| Zinc ppm ASTM D5185m       |            | <b>10</b>    | ---      | ---      |
| Sulfur ppm ASTM D5185m     |            | <b>27984</b> | ---      | ---      |

## CONTAMINANTS

| method                    | limit/base | current      | history1 | history2 |
|---------------------------|------------|--------------|----------|----------|
| Silicon ppm ASTM D5185m   | >75        | <b>44</b>    | ---      | ---      |
| Sodium ppm ASTM D5185m    |            | <b>5</b>     | ---      | ---      |
| Potassium ppm ASTM D5185m | >20        | <b>0</b>     | ---      | ---      |
| Water % ASTM D6304        | >.2        | <b>0.033</b> | ---      | ---      |
| ppm Water ppm ASTM D6304  | >2000      | <b>338</b>   | ---      | ---      |

## FLUID CLEANLINESS

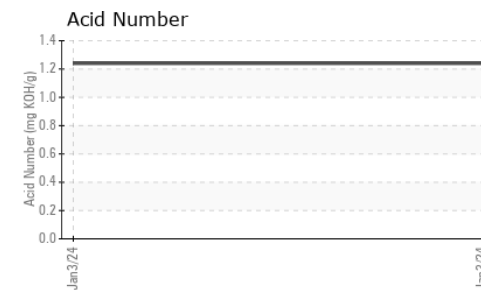
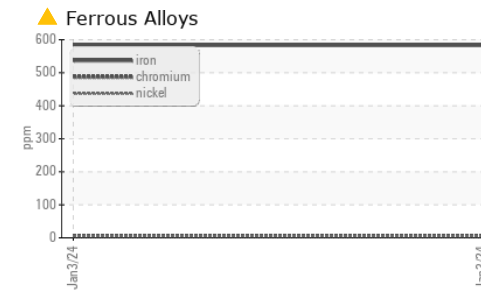
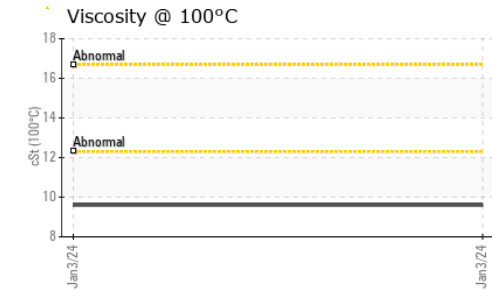
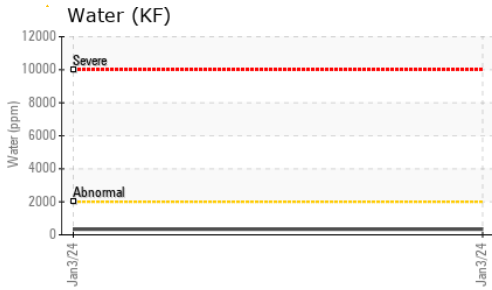
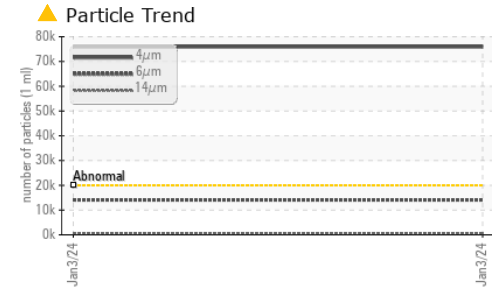
| method                       | limit/base | current           | history1 | history2 |
|------------------------------|------------|-------------------|----------|----------|
| Particles >4µm ASTM D7647    | >20000     | <b>▲ 75925</b>    | ---      | ---      |
| Particles >6µm ASTM D7647    | >5000      | <b>▲ 14088</b>    | ---      | ---      |
| Particles >14µm ASTM D7647   | >640       | <b>▲ 654</b>      | ---      | ---      |
| Particles >21µm ASTM D7647   | >160       | <b>145</b>        | ---      | ---      |
| Particles >38µm ASTM D7647   | >40        | <b>6</b>          | ---      | ---      |
| Particles >71µm ASTM D7647   | >10        | <b>0</b>          | ---      | ---      |
| Oil Cleanliness ISO 4406 (c) | >21/19/16  | <b>▲ 23/21/17</b> | ---      | ---      |

## FLUID DEGRADATION

| method                               | limit/base | current     | history1 | history2 |
|--------------------------------------|------------|-------------|----------|----------|
| Acid Number (AN) mg KOH/g ASTM D8045 |            | <b>1.24</b> | ---      | ---      |



# OIL ANALYSIS REPORT



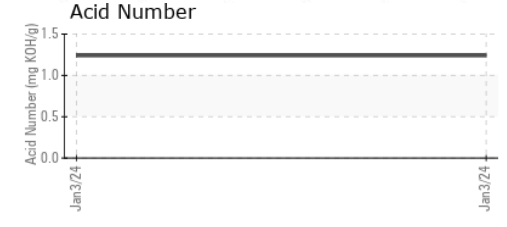
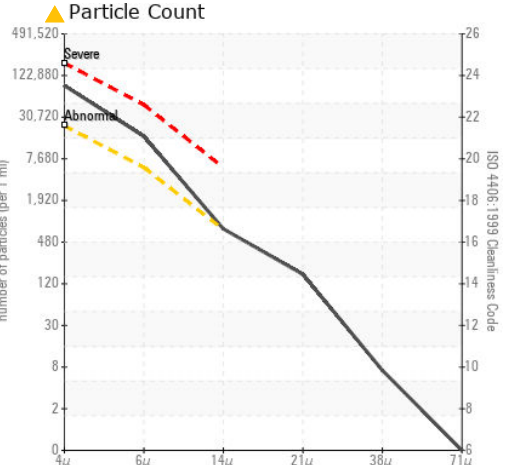
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | ---      |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | ---      |
|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

| FLUID PROPERTIES     | method | limit/base | current | history1 | history2 |
|----------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C          | cSt    | ASTM D445  | 53.0    | ---      | ---      |
| Visc @ 100°C         | cSt    | ASTM D445  | 9.6     | ---      | ---      |
| Viscosity Index (VI) | Scale  | ASTM D2270 | 167     | ---      | ---      |

## 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.** : WC0900852 **Received** : 21 Mar 2024  
**Lab Number** : 06124920 **Tested** : 22 Mar 2024  
**Unique Number** : 10939071 **Diagnosed** : 26 Mar 2024 - Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: KF, KV100, PrtCount, VI )

**BASF - GIANNA CREDAROLI**  
 500 WHITE PLAINS RD  
 TARRYTOWN, NY  
 US 10591  
 Contact: GIANNA CREDAROLI  
 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)