



# OIL ANALYSIS REPORT

|                 |                 |
|-----------------|-----------------|
| WEAR            | <b>ABNORMAL</b> |
| CONTAMINATION   | <b>NORMAL</b>   |
| FLUID CONDITION | <b>NORMAL</b>   |

Machine Id  
**CR5503 - INNER**  
Component  
**Front Right Planetary**  
Fluid  
**GEAR OIL ISO 220 (--- GAL)**

## RECOMMENDATION

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|----------|
| Sample Number  |     | Client Info |           | <b>WC0952098</b>   | WC0877341   | ---      |
| Sample Date    |     | Client Info |           | <b>14 Jun 2024</b> | 19 Jan 2024 | ---      |
| Machine Age    | hrs | Client Info |           | <b>10882</b>       | 10142       | ---      |
| Oil Age        | hrs | Client Info |           | <b>740</b>         | 0           | ---      |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 0           | ---      |
| Oil Changed    |     | Client Info |           | <b>Changed</b>     | Changed     | ---      |
| Filter Changed |     | Client Info |           | <b>Not Chngd</b>   | Changed     | ---      |
| Sample Status  |     |             |           | <b>ABNORMAL</b>    | NORMAL      | ---      |

## WEAR

Bearing and/or bushing wear is indicated. All other component wear rates are normal.

|              |        |             |      |              |      |     |
|--------------|--------|-------------|------|--------------|------|-----|
| Iron         | ppm    | ASTM D5185m | >500 | <b>17</b>    | 28   | --- |
| Chromium     | ppm    | ASTM D5185m | >10  | <b>0</b>     | 0    | --- |
| Nickel       | ppm    | ASTM D5185m | >10  | <b>&lt;1</b> | 0    | --- |
| Titanium     | ppm    | ASTM D5185m |      | <b>0</b>     | 0    | --- |
| Silver       | ppm    | ASTM D5185m |      | <b>0</b>     | 0    | --- |
| Aluminum     | ppm    | ASTM D5185m | >25  | <b>&lt;1</b> | 0    | --- |
| Lead         | ppm    | ASTM D5185m | >25  | <b>0</b>     | 0    | --- |
| Copper       | ppm    | ASTM D5185m | >75  | <b>▲ 99</b>  | 18   | --- |
| Tin          | ppm    | ASTM D5185m | >10  | <b>1</b>     | 4    | --- |
| Vanadium     | ppm    | ASTM D5185m |      | <b>0</b>     | 0    | --- |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | --- |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | --- |

## CONTAMINATION

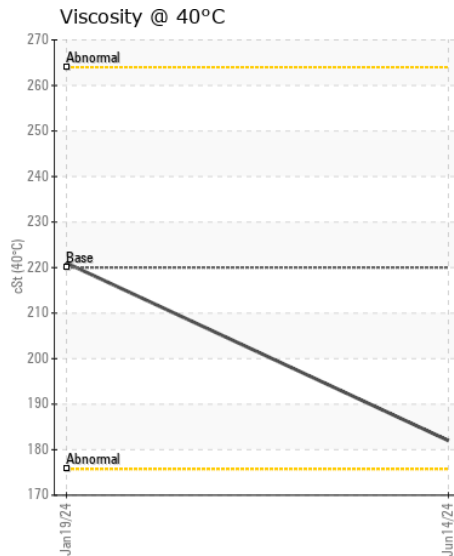
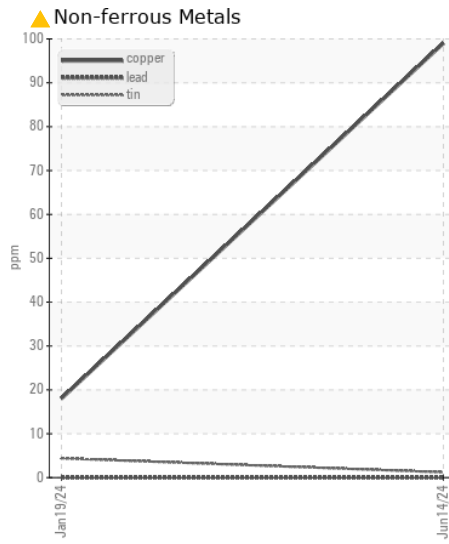
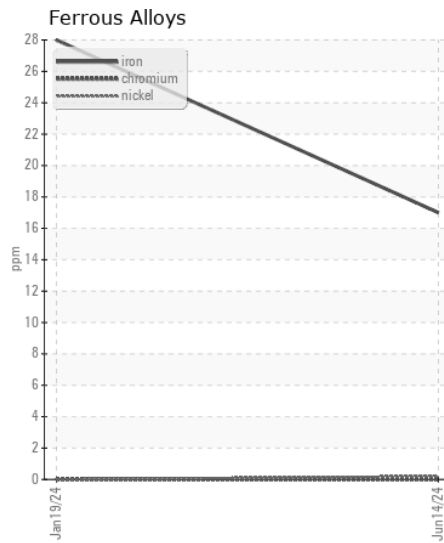
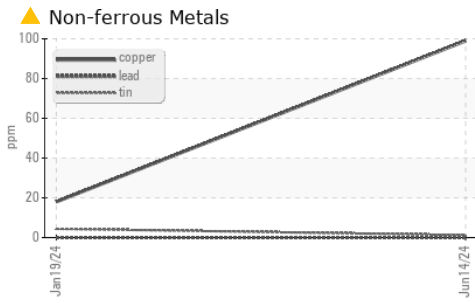
There is no indication of any contamination in the oil.

|                  |        |             |       |              |       |     |
|------------------|--------|-------------|-------|--------------|-------|-----|
| Silicon          | ppm    | ASTM D5185m | >75   | <b>&lt;1</b> | 1     | --- |
| Potassium        | ppm    | ASTM D5185m | >20   | <b>2</b>     | 0     | --- |
| Water            |        | WC Method   | >0.2  | <b>NEG</b>   | NEG   | --- |
| Silt             | scalar | *Visual     | NONE  | <b>NONE</b>  | MODER | --- |
| Debris           | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE  | --- |
| Sand/Dirt        | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE  | --- |
| Appearance       | scalar | *Visual     | NORML | <b>NORML</b> | NORML | --- |
| Odor             | scalar | *Visual     | NORML | <b>NORML</b> | NORML | --- |
| Emulsified Water | scalar | *Visual     | >0.2  | <b>NEG</b>   | NEG   | --- |

## FLUID CONDITION

The condition of the oil is acceptable for the time in service.

|            |     |             |       |              |      |     |
|------------|-----|-------------|-------|--------------|------|-----|
| Sodium     | ppm | ASTM D5185m |       | <b>&lt;1</b> | 0    | --- |
| Boron      | ppm | ASTM D5185m | 50    | <b>5</b>     | 7    | --- |
| Barium     | ppm | ASTM D5185m | 15    | <b>0</b>     | 0    | --- |
| Molybdenum | ppm | ASTM D5185m | 15    | <b>0</b>     | 0    | --- |
| Manganese  | ppm | ASTM D5185m |       | <b>&lt;1</b> | 0    | --- |
| Magnesium  | ppm | ASTM D5185m | 50    | <b>2</b>     | 0    | --- |
| Calcium    | ppm | ASTM D5185m | 50    | <b>237</b>   | 0    | --- |
| Phosphorus | ppm | ASTM D5185m | 350   | <b>310</b>   | 327  | --- |
| Zinc       | ppm | ASTM D5185m | 100   | <b>83</b>    | 11   | --- |
| Sulfur     | ppm | ASTM D5185m | 12500 | <b>4594</b>  | 4933 | --- |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0952098  
**Lab Number** : 06218957  
**Unique Number** : 11097154  
**Test Package** : CONST

**Received** : 24 Jun 2024  
**Tested** : 25 Jun 2024  
**Diagnosed** : 26 Jun 2024 - Don Baldrige

**BUCKNER HEAVY LIFT**  
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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)