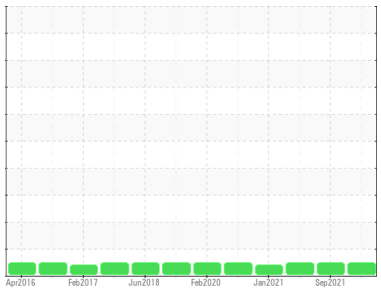
# OIL ANALYSIS REPORT

Sample Rating Trend




NORMAL

Area
**CAPL**
Machine Id
**CAPL-BRIDLEROLL 4.1 (S/N 16-3100-0615)**
Component
**Gearbox**
Fluid
**GEAR OIL ISO 460 (--- QTS)**

## DIAGNOSIS

**Recommendation**
Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

**Wear**
All component wear rates are normal.

**Contamination**
The water content is negligible. There is no indication of any contamination 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 | | **RP0044206** | RP0010580 | RP0013735 |
| Sample Date | | Client Info | | **05 Jun 2024** | 02 Sep 2021 | 10 Feb 2021 |
| Machine Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Changed | | Client Info | | **N/A** | N/A | N/A |
| Sample Status | | | | **NORMAL** | NORMAL | NORMAL |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| PQ | | ASTM D8184 | | **30** | 53 | 52 |
| Iron | ppm | ASTM D5185m | >200 | **65** | 24 | 82 |
| Chromium | ppm | ASTM D5185m | >15 | **<1** | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >15 | **<1** | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | **<1** | 0 | 0 |
| Silver | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | **2** | <1 | 0 |
| Lead | ppm | ASTM D5185m | >100 | **0** | 0 | 0 |
| Copper | ppm | ASTM D5185m | >200 | **<1** | <1 | 0 |
| Tin | ppm | ASTM D5185m | >25 | **<1** | 0 | 0 |
| Antimony | ppm | ASTM D5185m | >5 | **---** | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | **<1** | 0 | 0 |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | 50 | **22** | 18 | 18 |
| Barium | ppm | ASTM D5185m | 15 | **9** | 0 | 6 |
| Molybdenum | ppm | ASTM D5185m | 15 | **<1** | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | **<1** | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 50 | **2** | 2 | 0 |
| Calcium | ppm | ASTM D5185m | 50 | **34** | 10 | 43 |
| Phosphorus | ppm | ASTM D5185m | 350 | **195** | 197 | 189 |
| Zinc | ppm | ASTM D5185m | 100 | **28** | 2 | 18 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >50 | **4** | 2 | 2 |
| Sodium | ppm | ASTM D5185m | | **<1** | 0 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | **1** | 0 | <1 |
| Water | % | ASTM D6304 | >0.2 | **0.004** | 0.008 | 0.010 |
| ppm Water | ppm | ASTM D6304 | >2000 | **40** | 81.9 | 105.3 |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.85 | **0.70** | 0.714 | 0.686 |

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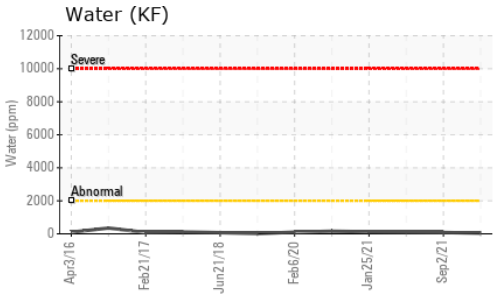
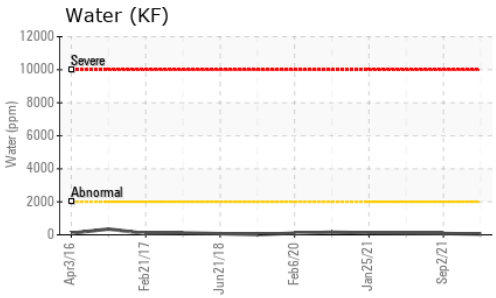
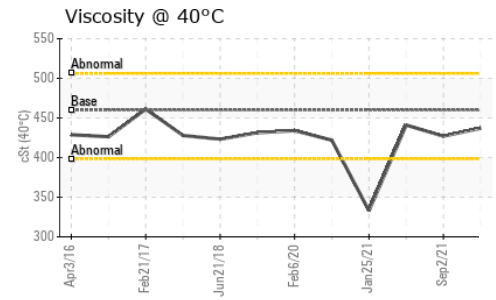
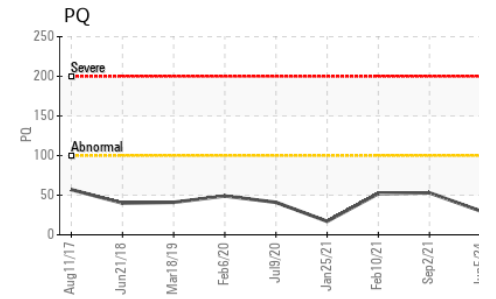


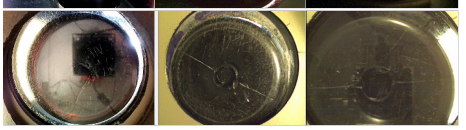



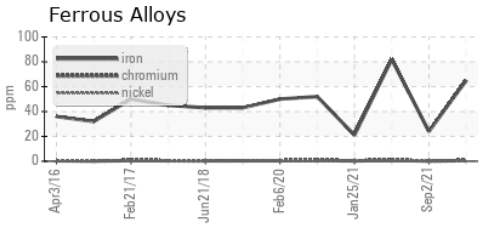



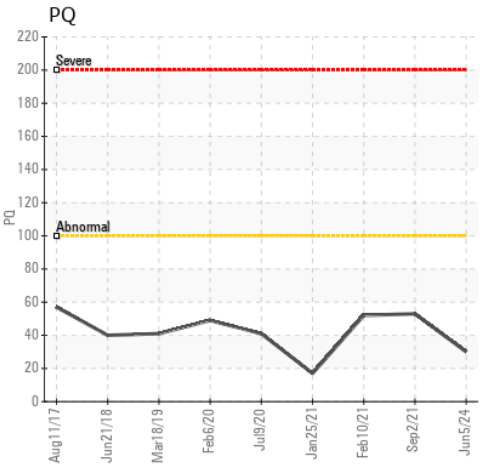

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | VLITE | NONE |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Silt | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Debris | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Appearance | scalar | *Visual | NORML | **NORML** | NORML | NORML |
| Odor | scalar | *Visual | NORML | **NORML** | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.2 | **NEG** | NEG | NEG |
| Free Water | scalar | *Visual | | **NEG** | NEG | NEG |

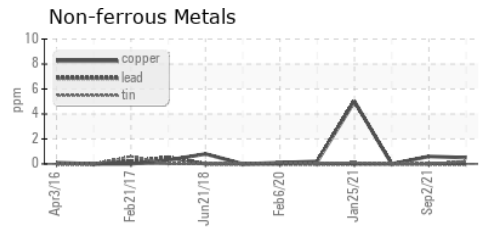
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 460 | **437** | 427 | 441 |

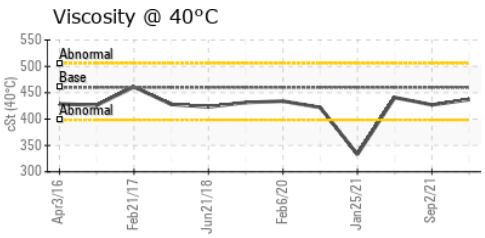
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  | | |
| Bottom | | |  | | |

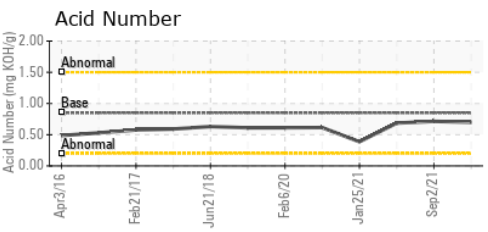
## GRAPHS





**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : RP0044206
**Lab Number** : 06201565
**Unique Number** : 11063688
**Test Package** : IND 2 ( Additional Tests: PQ )

**Received** : 06 Jun 2024
**Tested** : 07 Jun 2024
**Diagnosed** : 07 Jun 2024 - Wes Davis

Certificate L2367


*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)*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Submitted By: DALE ROBINSON