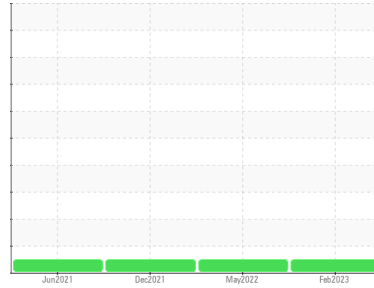




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**INNERLINER**  
 Machine Id  
**[INNERLINER] MOT\_034B TOP MOTOR 034B GB**  
 Component  
**Gearbox**  
 Fluid  
**GEAR OIL ISO 320 (555 LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

All component wear rates are normal.

### Contamination

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 |             |            | <b>WC0701744</b>   | WC0688510   | WC0641703   |
| Sample Date        | Client Info |             |            | <b>05 Feb 2023</b> | 05 May 2022 | 08 Dec 2021 |
| Machine Age        | hrs         | Client Info |            | <b>0</b>           | 0           | 0           |
| Oil Age            | hrs         | Client Info |            | <b>0</b>           | 0           | 0           |
| Oil Changed        | Client Info |             |            | <b>N/A</b>         | N/A         | N/A         |
| Sample Status      |             |             |            | <b>NORMAL</b>      | NORMAL      | NORMAL      |

| CONTAMINATION |           | method | limit/base | current    | history1 | history2 |
|---------------|-----------|--------|------------|------------|----------|----------|
| Water         | WC Method |        | >0.2       | <b>NEG</b> | NEG      | NEG      |

| WEAR METALS |     | method      | limit/base | current    | history1 | history2 |
|-------------|-----|-------------|------------|------------|----------|----------|
| PQ          |     | ASTM D8184  |            | <b>8</b>   | ---      | ---      |
| Iron        | ppm | ASTM D5185m | >200       | <b>7</b>   | 4        | 2        |
| Chromium    | ppm | ASTM D5185m | >15        | <b>0</b>   | 0        | 0        |
| Nickel      | ppm | ASTM D5185m | >15        | <b>0</b>   | <1       | <1       |
| Titanium    | ppm | ASTM D5185m |            | <b>0</b>   | 0        | 0        |
| Silver      | ppm | ASTM D5185m |            | <b>0</b>   | <1       | <1       |
| Aluminum    | ppm | ASTM D5185m | >25        | <b>0</b>   | <1       | 0        |
| Lead        | ppm | ASTM D5185m | >100       | <b>0</b>   | <1       | <1       |
| Copper      | ppm | ASTM D5185m | >200       | <b>0</b>   | <1       | <1       |
| Tin         | ppm | ASTM D5185m | >25        | <b>0</b>   | 1        | <1       |
| Antimony    | ppm | ASTM D5185m | >5         | <b>---</b> | ---      | 0        |
| Vanadium    | ppm | ASTM D5185m |            | <b>0</b>   | 0        | 0        |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>   | 0        | <1       |

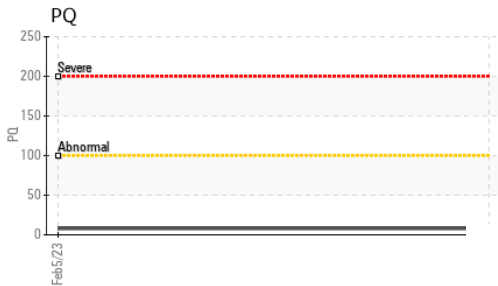
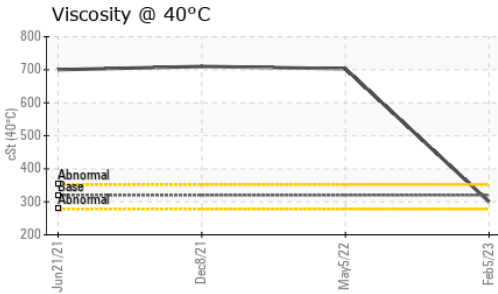
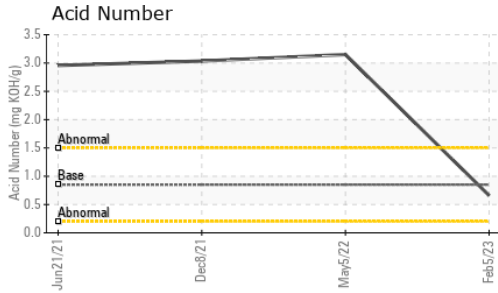
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m | 50         | <b>21</b>    | 10       | <1       |
| Barium     | ppm | ASTM D5185m | 15         | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm | ASTM D5185m | 15         | <b>&lt;1</b> | 0        | 0        |
| Manganese  | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Magnesium  | ppm | ASTM D5185m | 50         | <b>2</b>     | <1       | 0        |
| Calcium    | ppm | ASTM D5185m | 50         | <b>18</b>    | <1       | 1        |
| Phosphorus | ppm | ASTM D5185m | 350        | <b>294</b>   | 2491     | 1811     |
| Zinc       | ppm | ASTM D5185m | 100        | <b>4</b>     | 0        | 0        |
| Sulfur     | ppm | ASTM D5185m | 12500      | <b>17853</b> | 108      | 62       |

| CONTAMINANTS |     | method      | limit/base | current      | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >50        | <b>&lt;1</b> | 33       | 38       |
| Sodium       | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Potassium    | ppm | ASTM D5185m | >20        | <b>0</b>     | 2        | 0        |

| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 | 0.85       | <b>0.66</b> | 3.15     | 3.035    |



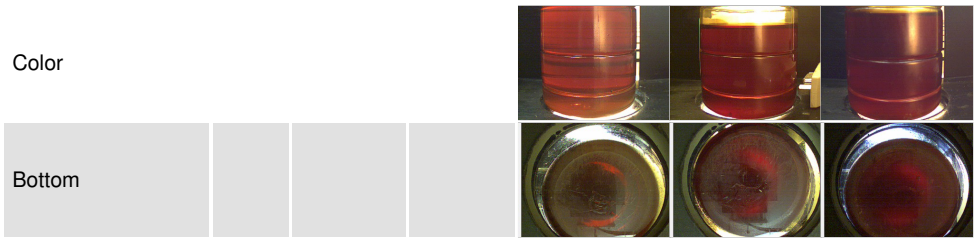
# OIL ANALYSIS REPORT



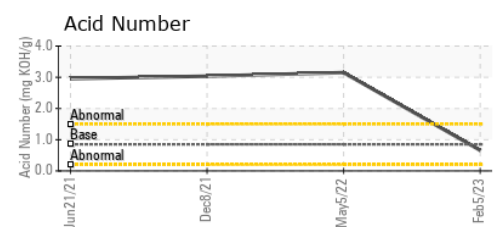
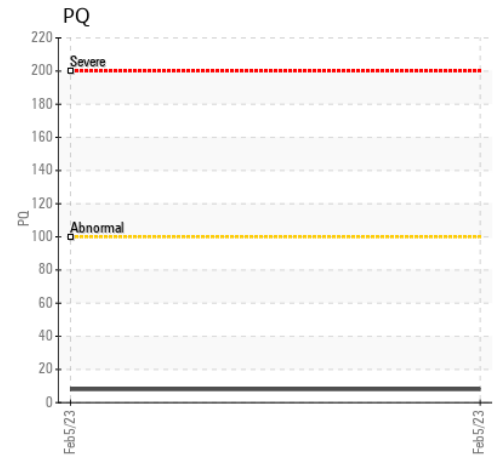
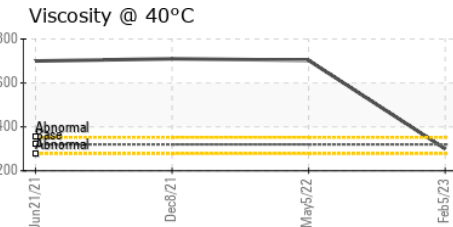
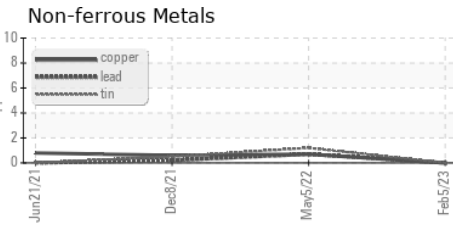
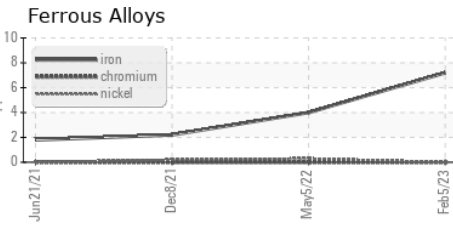
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
|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

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 320     | 300      | 703      |

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



## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0701744  
 Lab Number : 05759574  
 Unique Number : 10324181  
 Test Package : PLANT  
 Recieved : 06 Feb 2023  
 Diagnosed : 07 Feb 2023  
 Diagnostician : Wes Davis

**NOKIAN TYRES US OPERATIONS LLC**  
 520 NOKIAN TYRES DRIVE  
 DAYTON, TN  
 US 37321  
 Contact: CHRIS NAPIER  
 christopher.napier@nokiantyres.com  
 T: (423)457-3121  
 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)