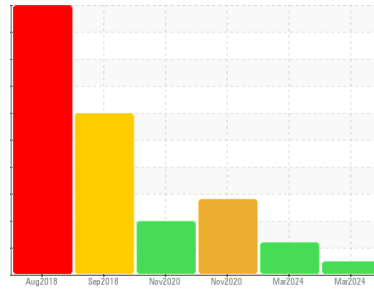




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**412**  
 Machine Id  
**273 PELLETIZER GEARBOX**  
 Component  
**Main Gearbox**  
 Fluid  
**MOBIL MOBILGEAR SHC 460 (110 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The amount and size of particulates present in the system are acceptable.

### 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>WC0912129</b>   | WC0838852   | WC0397528   |
| Sample Date        | Client Info |             |            | <b>28 Mar 2024</b> | 03 Mar 2024 | 10 Nov 2020 |
| 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>         | Not Changd  | N/A         |
| Sample Status      |             |             |            | <b>NORMAL</b>      | ABNORMAL    | SEVERE      |

| 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>16</b>    | 70       | 63       |
| Iron        | ppm | ASTM D5185m | >200       | <b>26</b>    | 93       | 47       |
| Chromium    | ppm | ASTM D5185m | >15        | <b>&lt;1</b> | <1       | <1       |
| Nickel      | ppm | ASTM D5185m | >15        | <b>&lt;1</b> | 1        | <1       |
| Titanium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | <1       | <1       |
| Silver      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Aluminum    | ppm | ASTM D5185m | >25        | <b>2</b>     | 6        | 0        |
| Lead        | ppm | ASTM D5185m | >100       | <b>&lt;1</b> | <1       | 1        |
| Copper      | ppm | ASTM D5185m | >200       | <b>4</b>     | 4        | 4        |
| Tin         | ppm | ASTM D5185m | >25        | <b>&lt;1</b> | 0        | 0        |
| Antimony    | ppm | ASTM D5185m | >5         | <b>---</b>   | ---      | 0        |
| Vanadium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Cadmium     | ppm | ASTM D5185m |            | <b>&lt;1</b> | <1       | <1       |

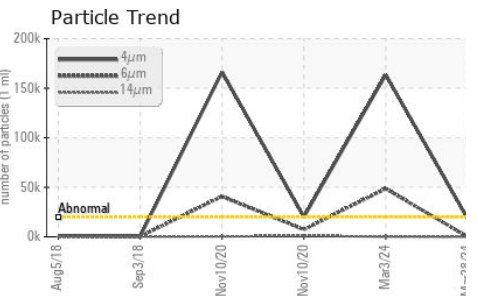
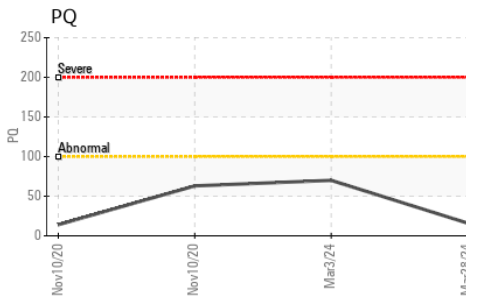
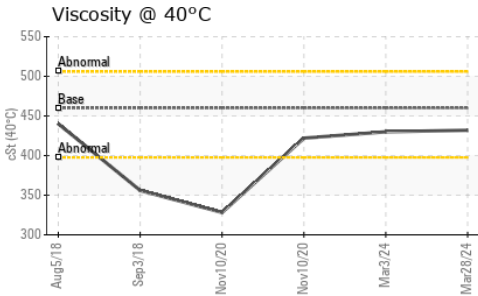
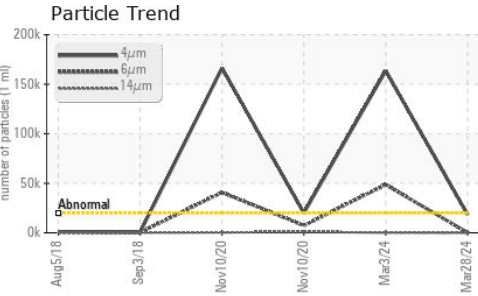
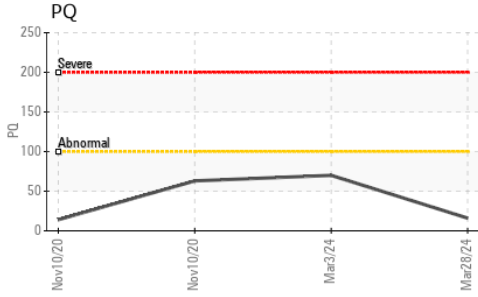
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | <1       |
| Barium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm | ASTM D5185m |            | <b>&lt;1</b> | <1       | <1       |
| Manganese  | ppm | ASTM D5185m |            | <b>&lt;1</b> | <1       | <1       |
| Magnesium  | ppm | ASTM D5185m |            | <b>1</b>     | 0        | <1       |
| Calcium    | ppm | ASTM D5185m |            | <b>6</b>     | 4        | 3        |
| Phosphorus | ppm | ASTM D5185m |            | <b>343</b>   | 435      | 375      |
| Zinc       | ppm | ASTM D5185m |            | <b>19</b>    | 7        | 0        |
| Sulfur     | ppm | ASTM D5185m |            | <b>2047</b>  | 2343     | 1686     |

| CONTAMINANTS |     | method      | limit/base | current   | history1 | history2 |
|--------------|-----|-------------|------------|-----------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >50        | <b>13</b> | 29       | 21       |
| Sodium       | ppm | ASTM D5185m |            | <b>1</b>  | <1       | 2        |
| Potassium    | ppm | ASTM D5185m | >20        | <b>1</b>  | 1        | <1       |

| FLUID CLEANLINESS |  | method       | limit/base | current         | history1   | history2   |
|-------------------|--|--------------|------------|-----------------|------------|------------|
| Particles >4µm    |  | ASTM D7647   | >20000     | <b>18384</b>    | ▲ 163522   | ▲ 166363   |
| Particles >6µm    |  | ASTM D7647   | >5000      | <b>96</b>       | ▲ 48587    | ▲ 40792    |
| Particles >14µm   |  | ASTM D7647   | >640       | <b>10</b>       | 153        | 345        |
| Particles >21µm   |  | ASTM D7647   | >160       | <b>4</b>        | 19         | 92         |
| Particles >38µm   |  | ASTM D7647   | >40        | <b>0</b>        | 1          | 7          |
| Particles >71µm   |  | ASTM D7647   | >10        | <b>0</b>        | 0          | 2          |
| Oil Cleanliness   |  | ISO 4406 (c) | >21/19/16  | <b>21/14/10</b> | ▲ 25/23/14 | ▲ 25/23/16 |



# OIL ANALYSIS REPORT

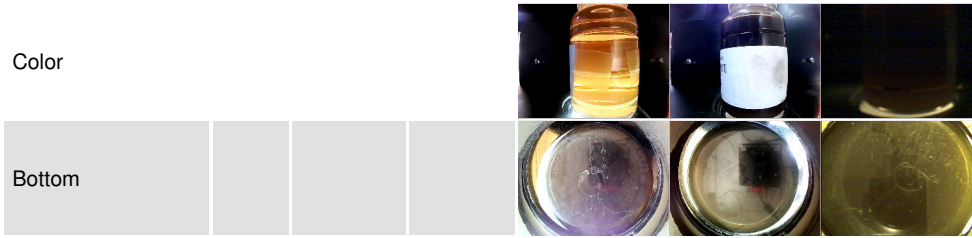


| FLUID DEGRADATION | method   | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 | <b>1.33</b> | 1.32     | 1.137    |

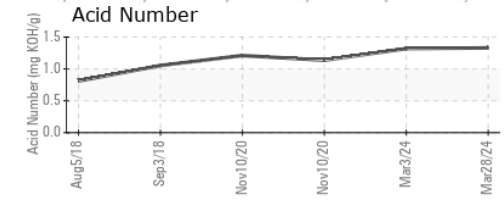
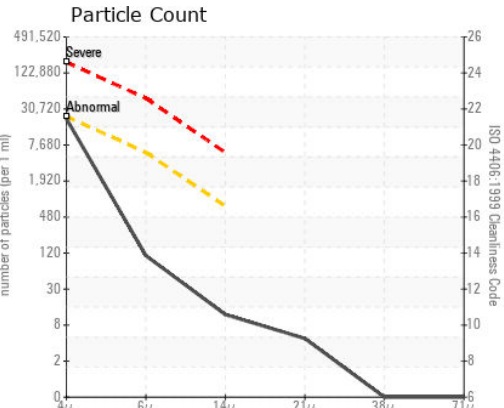
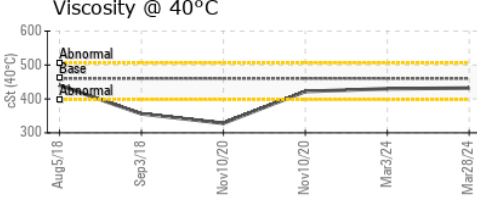
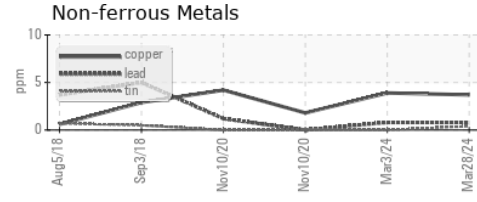
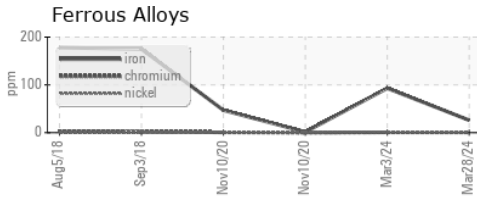
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| 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  | <b>432</b> | 430      | 422      |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0912129      **Received** : 04 Apr 2024  
**Lab Number** : **06138436**      **Tested** : 09 Apr 2024  
**Unique Number** : 10963244      **Diagnosed** : 09 Apr 2024 - Angela Borella  
**Test Package** : IND 2 ( Additional Tests: PQ, PrtCount )

**BRIDGESTONE FIRESTONE - DES MOINES**  
 4600 NW 2ND AVE  
 DES MOINES, IA 50313  
 Contact: SCOTT CARTER  
 CarterScottA@FirestoneAg.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)

T: x:  
F: x: