



# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Area  
**Contracting**

Machine Id  
**4205 4205**

Component  
**Front Vibratory Drum Gearbox**

Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a trace of moisture present in the oil. The amount and size of particulates present in the system are acceptable.

### Fluid Condition

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

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1 | history2 |
|---------------|-------------|-------------|--------------------|----------|----------|
| Sample Number | Client Info |             | <b>WC0937937</b>   | ---      | ---      |
| Sample Date   | Client Info |             | <b>11 Jun 2024</b> | ---      | ---      |
| Machine Age   | hrs         | Client Info | <b>1073</b>        | ---      | ---      |
| Oil Age       | hrs         | Client Info | <b>425</b>         | ---      | ---      |
| Oil Changed   | Client Info |             | <b>Not Chngd</b>   | ---      | ---      |
| Sample Status |             |             | <b>MARGINAL</b>    | ---      | ---      |

## WEAR METALS

|          | method | limit/base       | current      | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >200 | <b>17</b>    | ---      | ---      |
| Chromium | ppm    | ASTM D5185m >10  | <b>0</b>     | ---      | ---      |
| Nickel   | ppm    | ASTM D5185m >10  | <b>&lt;1</b> | ---      | ---      |
| Titanium | ppm    | ASTM D5185m      | <b>&lt;1</b> | ---      | ---      |
| Silver   | ppm    | ASTM D5185m      | <b>0</b>     | ---      | ---      |
| Aluminum | ppm    | ASTM D5185m      | <b>&lt;1</b> | ---      | ---      |
| Lead     | ppm    | ASTM D5185m      | <b>0</b>     | ---      | ---      |
| Copper   | ppm    | ASTM D5185m      | <b>2</b>     | ---      | ---      |
| Tin      | ppm    | ASTM D5185m      | <b>0</b>     | ---      | ---      |
| Vanadium | ppm    | ASTM D5185m      | <b>0</b>     | ---      | ---      |
| Cadmium  | ppm    | ASTM D5185m      | <b>2</b>     | ---      | ---      |

## ADDITIVES

|            | method | limit/base       | current     | history1 | history2 |
|------------|--------|------------------|-------------|----------|----------|
| Boron      | ppm    | ASTM D5185m 250  | <b>91</b>   | ---      | ---      |
| Barium     | ppm    | ASTM D5185m 10   | <b>2</b>    | ---      | ---      |
| Molybdenum | ppm    | ASTM D5185m 100  | <b>45</b>   | ---      | ---      |
| Manganese  | ppm    | ASTM D5185m      | <b>1</b>    | ---      | ---      |
| Magnesium  | ppm    | ASTM D5185m 450  | <b>453</b>  | ---      | ---      |
| Calcium    | ppm    | ASTM D5185m 3000 | <b>2025</b> | ---      | ---      |
| Phosphorus | ppm    | ASTM D5185m 1150 | <b>812</b>  | ---      | ---      |
| Zinc       | ppm    | ASTM D5185m 1350 | <b>934</b>  | ---      | ---      |
| Sulfur     | ppm    | ASTM D5185m 4250 | <b>3386</b> | ---      | ---      |

## CONTAMINANTS

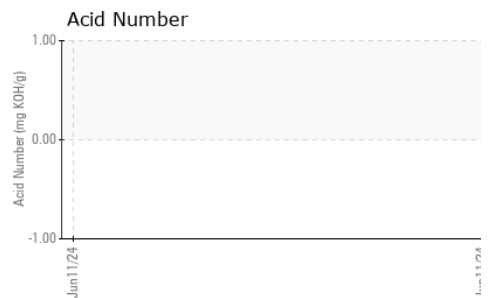
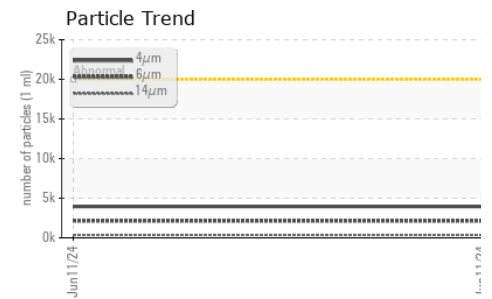
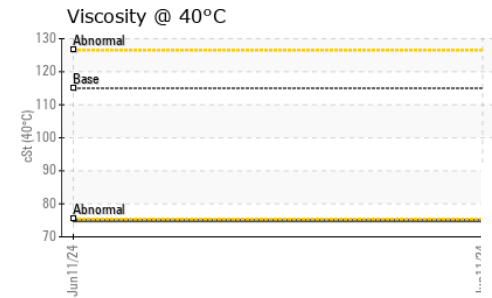
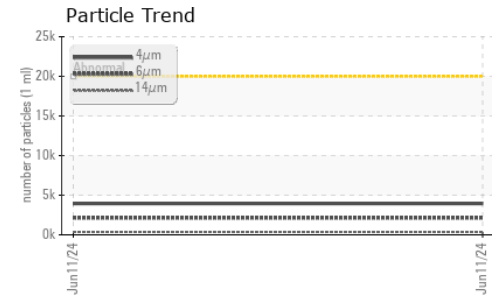
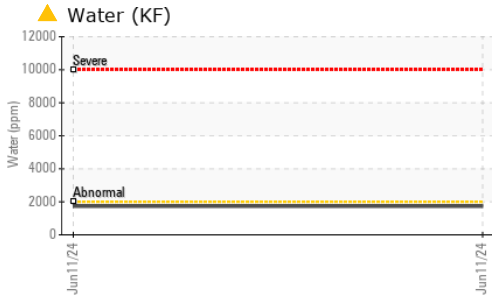
|           | method | limit/base       | current        | history1 | history2 |
|-----------|--------|------------------|----------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m      | <b>10</b>      | ---      | ---      |
| Sodium    | ppm    | ASTM D5185m >158 | <b>4</b>       | ---      | ---      |
| Potassium | ppm    | ASTM D5185m >20  | <b>3</b>       | ---      | ---      |
| Water     | %      | ASTM D6304 >0.2  | <b>▲ 0.173</b> | ---      | ---      |
| ppm Water | ppm    | ASTM D6304 >2000 | <b>▲ 1730</b>  | ---      | ---      |

## FLUID CLEANLINESS

|                 | method       | limit/base | current         | history1 | history2 |
|-----------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm  | ASTM D7647   | >20000     | <b>3941</b>     | ---      | ---      |
| Particles >6µm  | ASTM D7647   | >5000      | <b>2147</b>     | ---      | ---      |
| Particles >14µm | ASTM D7647   | >640       | <b>365</b>      | ---      | ---      |
| Particles >21µm | ASTM D7647   | >160       | <b>123</b>      | ---      | ---      |
| Particles >38µm | ASTM D7647   | >40        | <b>19</b>       | ---      | ---      |
| Particles >71µm | ASTM D7647   | >10        | <b>2</b>        | ---      | ---      |
| Oil Cleanliness | ISO 4406 (c) | >21/19/16  | <b>19/18/16</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    | MODER    | ---      |
| Debris           | scalar | *Visual    | NONE    | MODER    | ---      |
| Sand/Dirt        | scalar | *Visual    | NONE    | NONE     | ---      |
| Appearance       | scalar | *Visual    | NORML   | NORML    | ---      |
| Odor             | scalar | *Visual    | NORML   | NORML    | ---      |
| Emulsified Water | scalar | *Visual    | >0.2    | 0.2%     | ---      |
| Free Water       | scalar | *Visual    |         | NEG      | ---      |

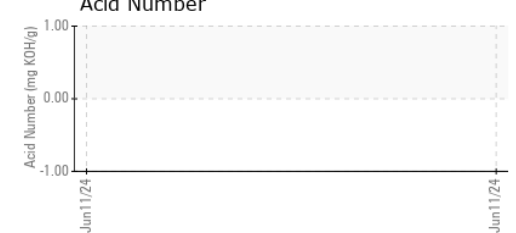
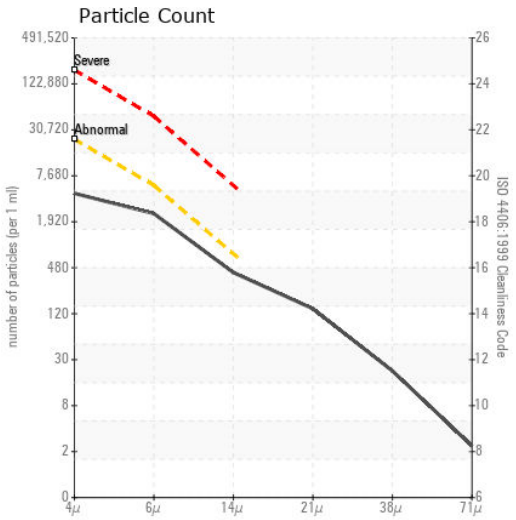
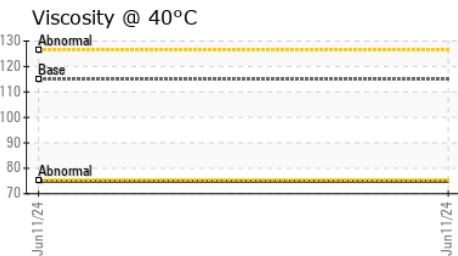
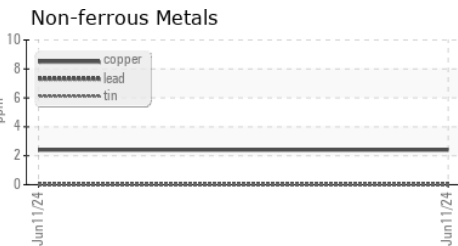
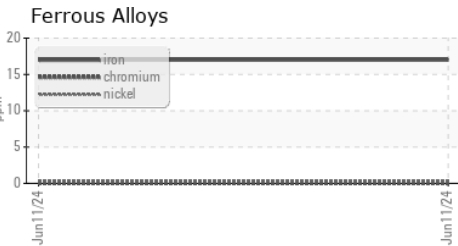
| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 115     | 74.9     | ---      |

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

Color

|        |  |          |          |
|--------|--|----------|----------|
|        |  | no image | no image |
| Bottom |  | no image | no image |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0937937 **Received** : 14 Jun 2024  
**Lab Number** : 06209937 **Tested** : 19 Jun 2024  
**Unique Number** : 11082801 **Diagnosed** : 20 Jun 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: KF, PrtCount )

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)

**CAROLINA SUNROCK**  
 PO BOX 25  
 BUTNER, NC  
 US 27509

Contact: Leigh Dennis  
rdennis@thesunrockgroup.com

T: (919)575-4505

F: (919)575-0162