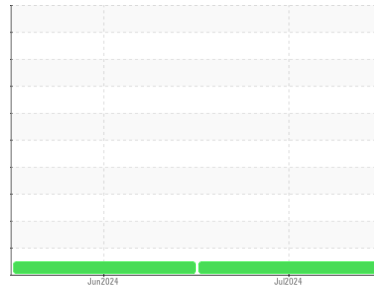




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

## Oil room tote 31

Component

### Bulk Fluid Tank

Fluid

### ROYAL PURPLE SYNFILM GT 150 (--- GAL)

#### DIAGNOSIS

##### Recommendation

This is a baseline read-out on the submitted sample.

#### SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1    | history2 |
|---------------|-------------|-------------|--------------------|-------------|----------|
| Sample Number | Client Info |             | <b>RP0038988</b>   | RP0042858   | ---      |
| Sample Date   | Client Info |             | <b>12 Jul 2024</b> | 05 Jun 2024 | ---      |
| Machine Age   | hrs         | Client Info | <b>0</b>           | 0           | ---      |
| Oil Age       | hrs         | Client Info | <b>0</b>           | 0           | ---      |
| Oil Changed   | Client Info |             | <b>Not Changed</b> | Not Changed | ---      |
| Sample Status |             |             | <b>NORMAL</b>      | NORMAL      | ---      |

#### WEAR METALS

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

#### ADDITIVES

|            | method | limit/base  | current      | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m | <b>0</b>     | 0        | ---      |
| Barium     | ppm    | ASTM D5185m | <b>&lt;1</b> | 1        | ---      |
| Molybdenum | ppm    | ASTM D5185m | <b>0</b>     | 0        | ---      |
| Manganese  | ppm    | ASTM D5185m | <b>0</b>     | <1       | ---      |
| Magnesium  | ppm    | ASTM D5185m | <b>97</b>    | 95       | ---      |
| Calcium    | ppm    | ASTM D5185m | <b>1</b>     | 2        | ---      |
| Phosphorus | ppm    | ASTM D5185m | <b>0</b>     | 1        | ---      |
| Zinc       | ppm    | ASTM D5185m | <b>2</b>     | 6        | ---      |

#### CONTAMINANTS

|           | method | limit/base  | current       | history1 | history2 |
|-----------|--------|-------------|---------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m | <b>2</b>      | 2        | ---      |
| Sodium    | ppm    | ASTM D5185m | <b>2</b>      | 2        | ---      |
| Potassium | ppm    | ASTM D5185m | <b>&gt;20</b> | 3        | ---      |
| Water     | %      | ASTM D6304  | <b>0.022</b>  | 0.019    | ---      |
| ppm Water | ppm    | ASTM D6304  | <b>221</b>    | 191      | ---      |

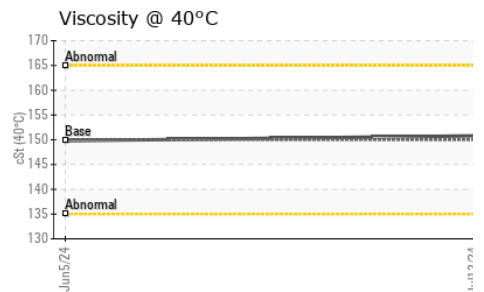
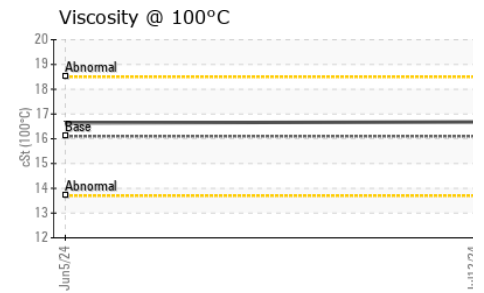
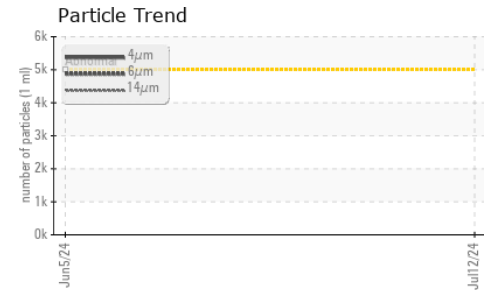
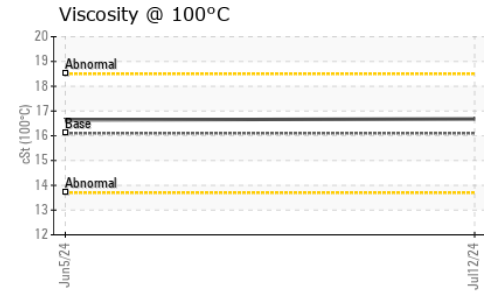
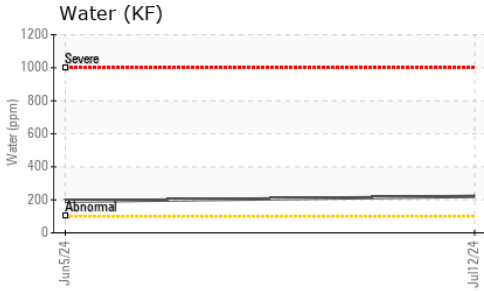
#### FLUID CLEANLINESS

|                 | method       | limit/base | current         | history1 | history2 |
|-----------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm  | ASTM D7647   | >5000      | <b>319</b>      | ---      | ---      |
| Particles >6µm  | ASTM D7647   | >1300      | <b>63</b>       | ---      | ---      |
| Particles >14µm | ASTM D7647   | >160       | <b>5</b>        | ---      | ---      |
| Particles >21µm | ASTM D7647   | >40        | <b>2</b>        | ---      | ---      |
| Particles >38µm | ASTM D7647   | >10        | <b>1</b>        | ---      | ---      |
| Particles >71µm | ASTM D7647   | >3         | <b>1</b>        | ---      | ---      |
| Oil Cleanliness | ISO 4406 (c) | >19/17/14  | <b>15/13/10</b> | ---      | ---      |

#### FLUID DEGRADATION

|                  | method   | limit/base | current     | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | <b>0.42</b> | 0.41     | ---      |

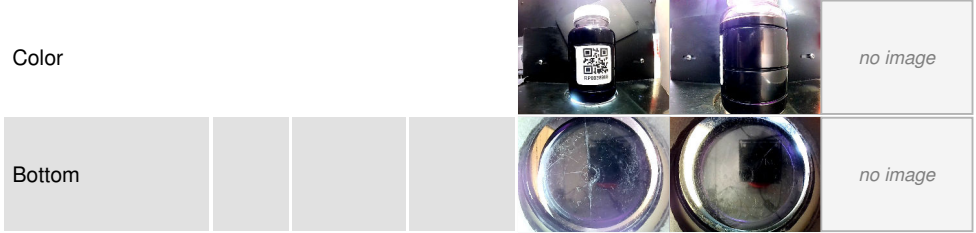
# OIL ANALYSIS REPORT



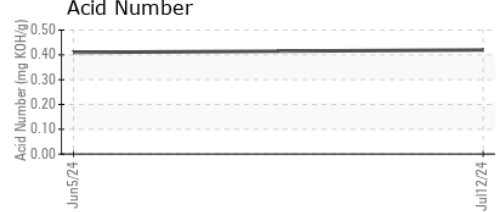
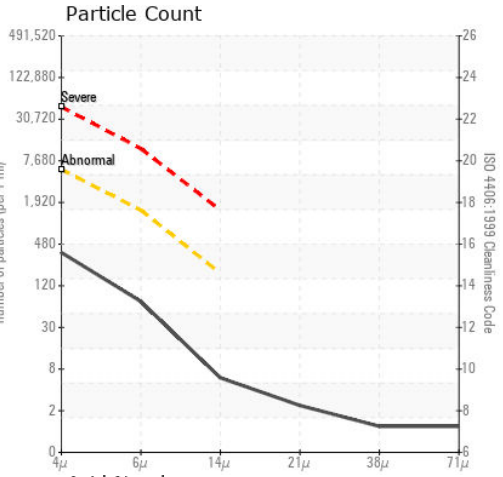
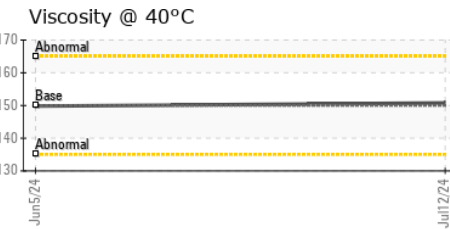
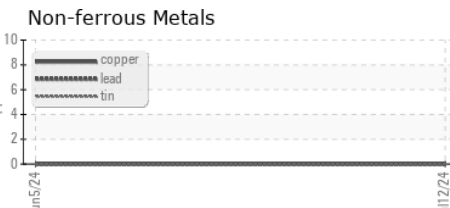
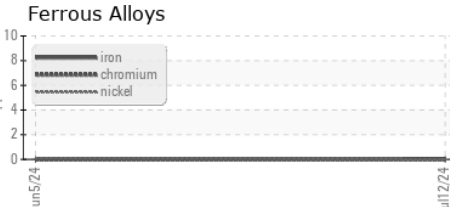
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | ---      |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | ---      |
|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

| FLUID PROPERTIES     | method | limit/base | current | history1 | history2 |
|----------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C          | cSt    | ASTM D445  | 150     | 150.8    | 149.8    |
| Visc @ 100°C         | cSt    | ASTM D445  | 16.1    | 16.68    | 16.64    |
| Viscosity Index (VI) | Scale  | ASTM D2270 | 112     | 118      | 118      |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0038988 **Received** : 16 Jul 2024  
**Lab Number** : 06238326 **Tested** : 17 Jul 2024  
**Unique Number** : 11127160 **Diagnosed** : 19 Jul 2024 - Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KV100, PrtCount, VI )

**CALUMET**  
 3333 MIDWAY AVENUE  
 SHREVEPORT, LA  
 US 71109  
 Contact: NICHOLAS LESAGE  
 nicholas.lesage@clmt.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)