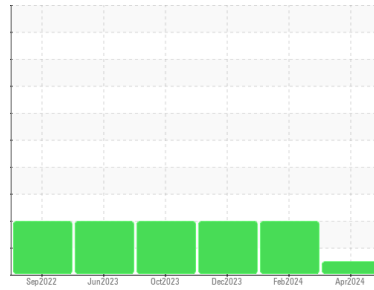


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**Nickelson**  
 Machine Id  
**Sany SY365 SY036MCB00618 Nickelson**  
 Component  
**Swing Drive**  
 Fluid  
**CITGO PREMIUM GEAR 80W90 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### 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>PCA0115505</b>  | LW0008314   | LW0008245   |
| Sample Date        | Client Info |             |            | <b>04 Apr 2024</b> | 28 Feb 2024 | 19 Dec 2023 |
| Machine Age        | hrs         | Client Info |            | <b>2845</b>        | 2576        | 2158        |
| Oil Age            | hrs         | Client Info |            | <b>2845</b>        | 2576        | 2158        |
| Oil Changed        | Client Info |             |            | <b>Not Changed</b> | Not Changd  | Not Changd  |
| Sample Status      |             |             |            | <b>NORMAL</b>      | ATTENTION   | ATTENTION   |

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

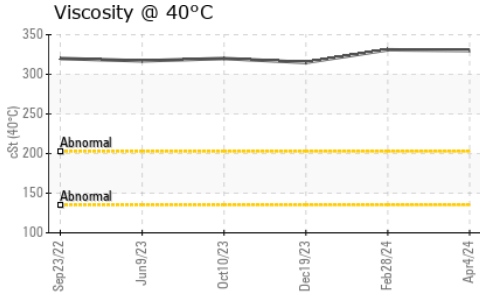
| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >400       | <b>173</b>   | 182      | 121      |
| Chromium    | ppm | ASTM D5185m | >10        | <b>7</b>     | 6        | 4        |
| Nickel      | ppm | ASTM D5185m | >10        | <b>&lt;1</b> | 0        | 0        |
| Titanium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Silver      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Aluminum    | ppm | ASTM D5185m | >25        | <b>2</b>     | <1       | 0        |
| Lead        | ppm | ASTM D5185m | >50        | <b>&lt;1</b> | 3        | 0        |
| Copper      | ppm | ASTM D5185m | >200       | <b>10</b>    | 9        | 9        |
| Tin         | ppm | ASTM D5185m | >10        | <b>&lt;1</b> | 0        | 0        |
| Vanadium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Cadmium     | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |

| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>9</b>     | 12       | 0        |
| Barium     | ppm | ASTM D5185m |            | <b>6</b>     | 5        | 4        |
| Molybdenum | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Manganese  | ppm | ASTM D5185m |            | <b>6</b>     | 5        | 5        |
| Magnesium  | ppm | ASTM D5185m |            | <b>2</b>     | <1       | 0        |
| Calcium    | ppm | ASTM D5185m |            | <b>11</b>    | 3        | 4        |
| Phosphorus | ppm | ASTM D5185m |            | <b>404</b>   | 366      | 270      |
| Zinc       | ppm | ASTM D5185m |            | <b>15</b>    | 0        | 7        |
| Sulfur     | ppm | ASTM D5185m |            | <b>32759</b> | 26923    | 27807    |

| CONTAMINANTS |     | method      | limit/base | current      | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >50        | <b>10</b>    | 9        | 9        |
| Sodium       | ppm | ASTM D5185m |            | <b>&lt;1</b> | 1        | 0        |
| Potassium    | ppm | ASTM D5185m | >20        | <b>2</b>     | 0        | <1       |

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

# OIL ANALYSIS REPORT

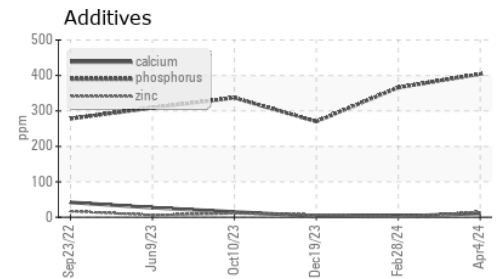
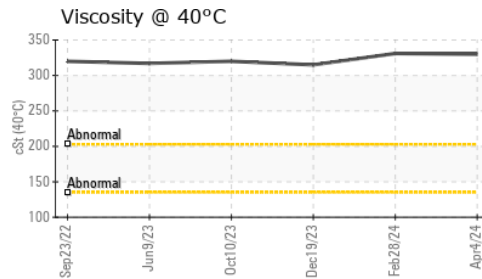
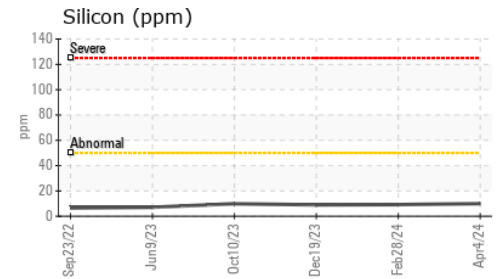
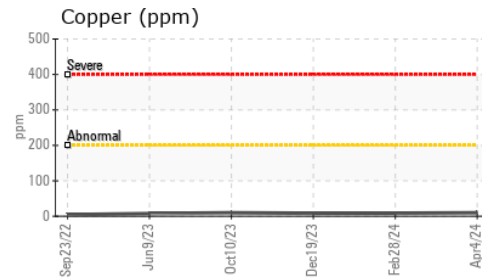
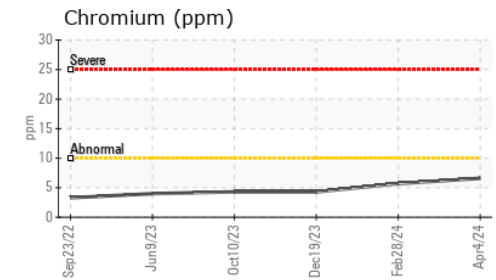
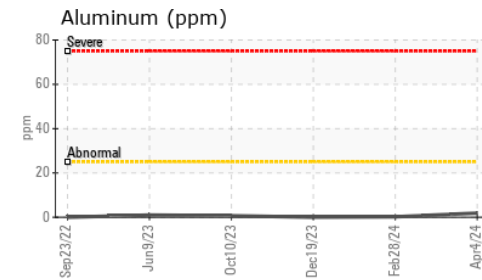
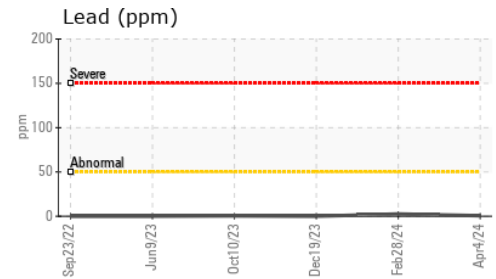
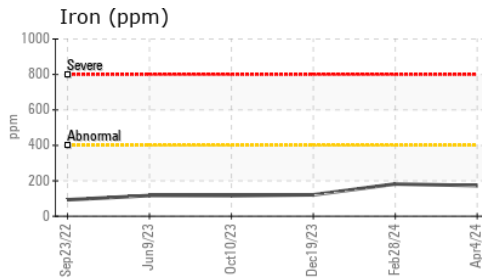


| FLUID PROPERTIES |     | method    | limit/base | current    | history1 | history2 |
|------------------|-----|-----------|------------|------------|----------|----------|
| Visc @ 40°C      | cSt | ASTM D445 |            | <b>330</b> | 331      | 315      |

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

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

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0115505  
**Lab Number** : 06143405  
**Unique Number** : 10968213  
**Test Package** : MOB 1

**Received** : 09 Apr 2024  
**Tested** : 10 Apr 2024  
**Diagnosed** : 12 Apr 2024 - Jonathan Hester

**CHICAGO MACHINERY INC**  
 3142 EAST LINCOLN  
 LYNWOOD, IL  
 US 60411-7728  
 Contact: Mike Korbelik  
 mike@chicagomachineryinc.com  
 T: (708)758-2060  
 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)