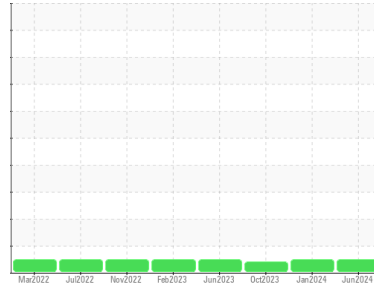




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

K-1

Component

Gearbox

Fluid

SHELL OMALA S2 GX 220 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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 | | | WC0917255 | WC0868174 | WC0831565 |
| Sample Date | Client Info | | | 03 Jun 2024 | 29 Jan 2024 | 16 Oct 2023 |
| Machine Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | Client Info | | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | ATTENTION |

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

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|-------------|------------|-----------|----------|----------|
| Iron | ppm | ASTM D5185m | >200 | 3 | 4 | 4 |
| Chromium | ppm | ASTM D5185m | >10 | 0 | <1 | 0 |
| Nickel | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 0 | 2 | 0 |
| Lead | ppm | ASTM D5185m | >50 | 0 | <1 | 0 |
| Copper | ppm | ASTM D5185m | >200 | 15 | 12 | 23 |
| Tin | ppm | ASTM D5185m | >10 | 0 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |

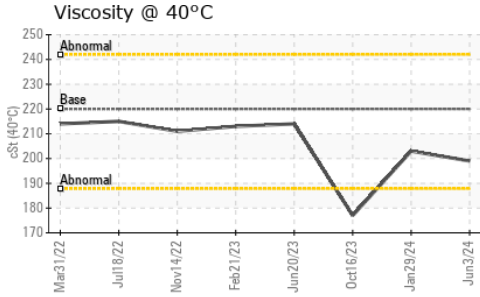
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | 6.2 | 0 | 0 | 1 |
| Barium | ppm | ASTM D5185m | 0.0 | 0 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | 0 | <1 | 2 | 17 |
| Calcium | ppm | ASTM D5185m | 0.0 | 2 | 1 | 3 |
| Phosphorus | ppm | ASTM D5185m | 290 | 281 | 273 | 233 |
| Zinc | ppm | ASTM D5185m | 3.8 | 7 | 3 | 9 |
| Sulfur | ppm | ASTM D5185m | 8167 | 10461 | 11093 | 6260 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m | >50 | 0 | 4 | 1 |
| Sodium | ppm | ASTM D5185m | | <1 | 0 | 2 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 1 | 0 |

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



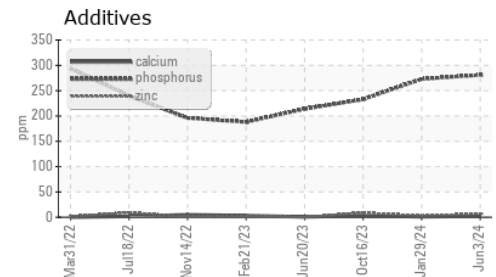
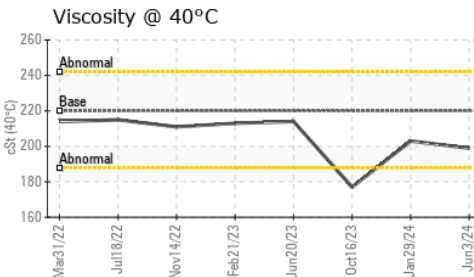
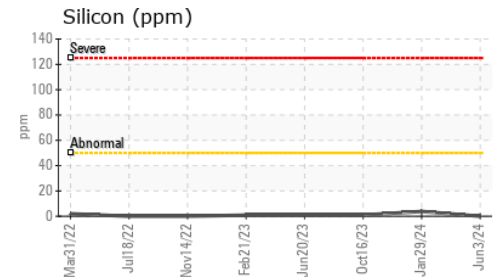
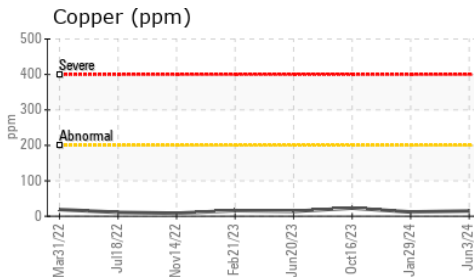
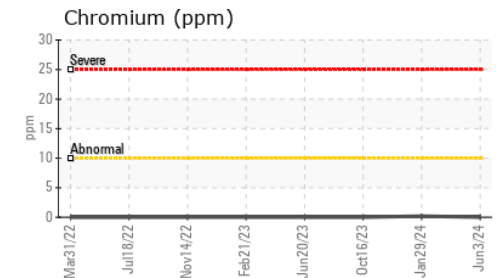
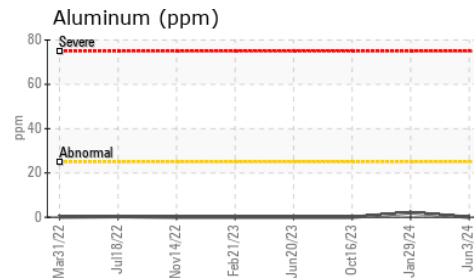
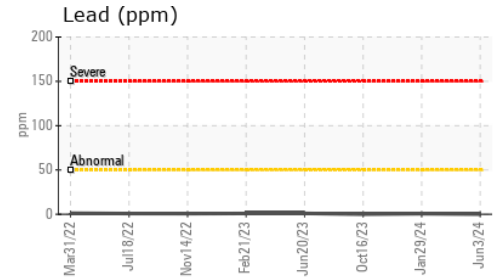
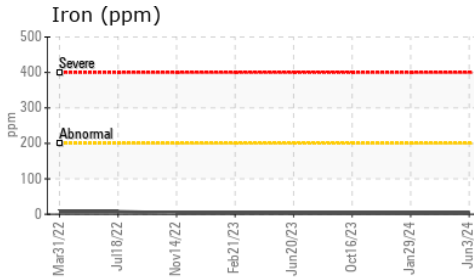
OIL ANALYSIS REPORT



| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|------------------|-----|-----------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 220 | 199 | 203 | 177 |

| 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. : WC0917255
Lab Number : 06199607
Unique Number : 11061730
Test Package : MOB 1
Received : 04 Jun 2024
Tested : 05 Jun 2024
Diagnosed : 05 Jun 2024 - Wes Davis

UNITED TOOL & STAMPING
 2817 ENTERPRISE AVE
 FAYETTEVILLE, NC
 US 28306
 Contact: KENNY BELL
 KENNY.BELL@UTS-NC.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)