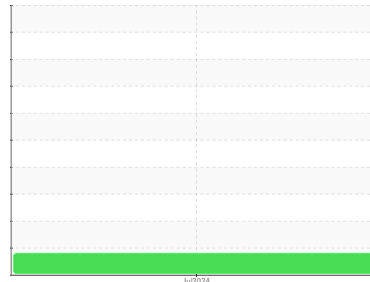




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area

DOOSAN MAX 46

Machine Id

DOOSAN D50 DOOSAN D50 - RITUS CORP (S/N NOT GIVEN)

Component

Compressor

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

The iron level is abnormal. All other component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris present in the oil. There is a moderate amount of visible silt present in the sample.

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 | | | UCZ06236144 | --- | --- |
| Sample Date | Client Info | | | 09 Jul 2024 | --- | --- |
| Machine Age | hrs | Client Info | | 14634 | --- | --- |
| Oil Age | hrs | Client Info | | 8812 | --- | --- |
| Oil Changed | Client Info | | | Changed | --- | --- |
| Sample Status | | | | ATTENTION | --- | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|-------------|------------|-----------|----------|----------|
| Iron | ppm | ASTM D5185m | >50 | 66 | --- | --- |
| Chromium | ppm | ASTM D5185m | >5 | 0 | --- | --- |
| Nickel | ppm | ASTM D5185m | | 0 | --- | --- |
| Titanium | ppm | ASTM D5185m | | 0 | --- | --- |
| Silver | ppm | ASTM D5185m | | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185m | >15 | 0 | --- | --- |
| Lead | ppm | ASTM D5185m | >65 | 0 | --- | --- |
| Copper | ppm | ASTM D5185m | >65 | 4 | --- | --- |
| Tin | ppm | ASTM D5185m | >10 | 0 | --- | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | --- | --- |
| Cadmium | ppm | ASTM D5185m | | 0 | --- | --- |

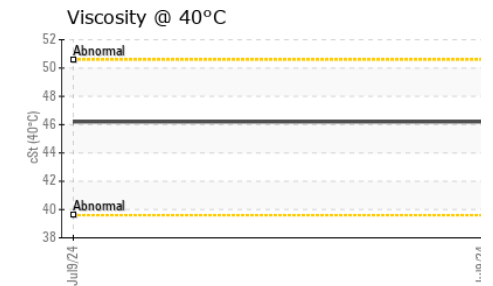
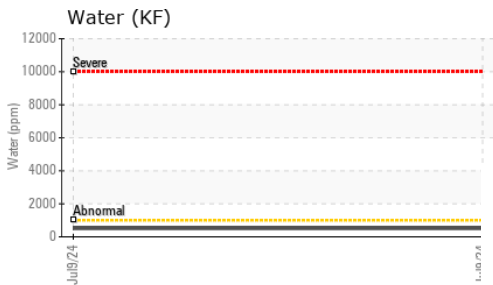
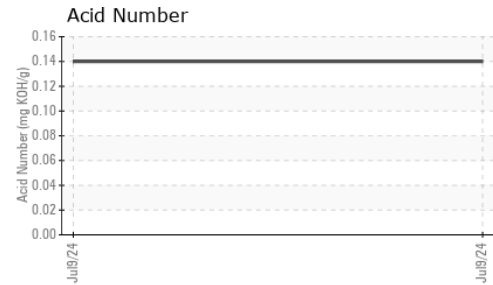
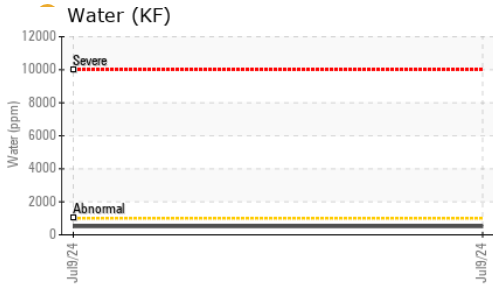
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|-------------|------------|-------------|----------|----------|
| Boron | ppm | ASTM D5185m | | 0 | --- | --- |
| Barium | ppm | ASTM D5185m | | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185m | | 0 | --- | --- |
| Manganese | ppm | ASTM D5185m | | 0 | --- | --- |
| Magnesium | ppm | ASTM D5185m | | 2 | --- | --- |
| Calcium | ppm | ASTM D5185m | | 0 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | | 357 | --- | --- |
| Zinc | ppm | ASTM D5185m | | 0 | --- | --- |
| Sulfur | ppm | ASTM D5185m | | 2429 | --- | --- |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m | >35 | 5 | --- | --- |
| Sodium | ppm | ASTM D5185m | | <1 | --- | --- |
| Potassium | ppm | ASTM D5185m | >20 | 0 | --- | --- |
| Water | % | ASTM D6304 | >0.1 | 0.051 | --- | --- |
| ppm Water | ppm | ASTM D6304 | >1000 | 510 | --- | --- |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.14 | --- | --- |



OIL ANALYSIS REPORT



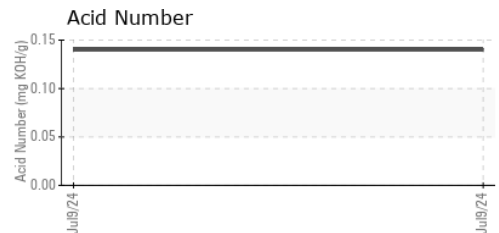
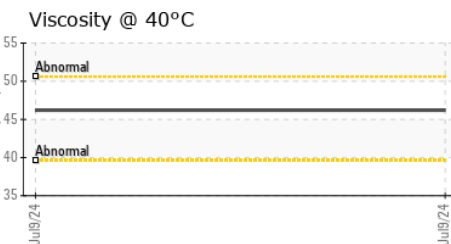
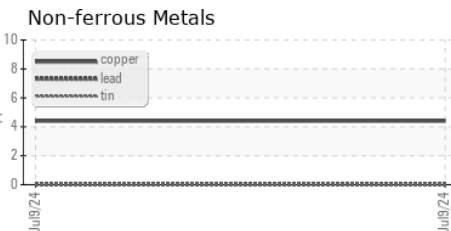
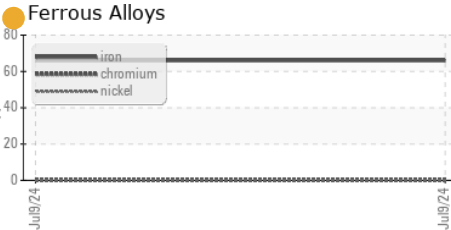
| VISUAL | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|----------|----------|-----|
| White Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Precipitate | scalar | *Visual | 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 | >0.1 | 0.2% | --- | --- |
| Free Water | scalar | *Visual | | NEG | --- | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 46.2 | --- | --- |

| 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. : UCZ06236144

Lab Number : 06236144

Unique Number : 11124978

Test Package : IND 2 (Additional Tests: KF)

Received : 15 Jul 2024

Tested : 16 Jul 2024

Diagnosed : 17 Jul 2024 - Don Baldrige

ZORN COMP & EQUIPMENT INC - MAIN

1335 E WISCONSIN AVE

PEWAUKEE, WI

US 53072

Contact: TONY STELLA

tony.stella@zornair.com

T: (800)476-4637

F: (262)695-7017

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)