



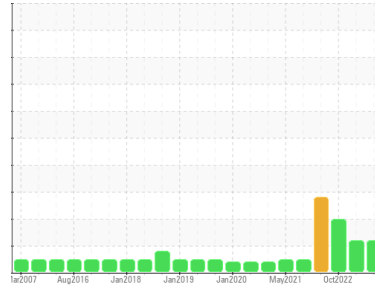
PROBLEM SUMMARY

Sample Rating Trend

ISO

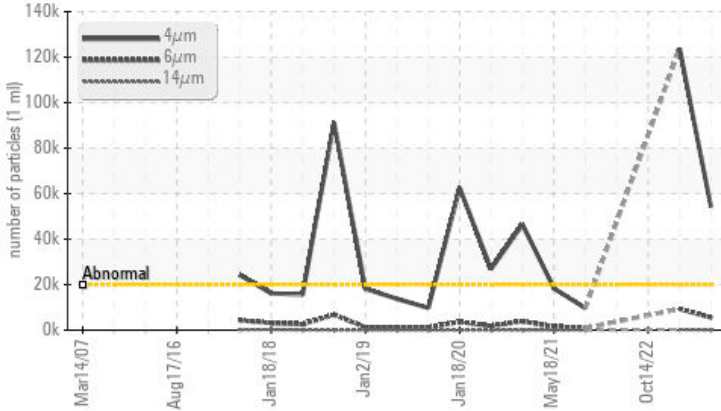


Area
No. 1 Paper Machine
 Machine Id
1 PM 1ST Press Bottom Roll Drive Str.#5 (S/N MO27565-5)
 Component
Gear Unit
 Fluid
ROYAL PURPLE SYNERGY 90/220 (19 GAL)



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

| Sample Status | | | ABNORMAL | ABNORMAL | ABNORMAL |
|-----------------|--------------|-----------|-------------------|------------|----------|
| Particles >4µm | ASTM D7647 | >20000 | ▲ 54174 | ▲ 123799 | --- |
| Particles >6µm | ASTM D7647 | >5000 | ▲ 5517 | ▲ 9345 | --- |
| Oil Cleanliness | ISO 4406 (c) | >21/19/16 | ▲ 23/20/13 | ▲ 24/20/15 | --- |

Customer Id: INTTEX
 Sample No.: RP0038223
 Lab Number: 05968340
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

27 Dec 2022 Diag: Doug Bogart

ISO



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



14 Oct 2022 Diag: Jonathan Hester

WATER



We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. There is a moderate concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



11 Mar 2022 Diag: Doug Bogart

WATER



We advise that you check for the source of water entry. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. Else, we recommend that you drain the oil and perform a filter service on this component if not already done. Resample at the next service interval to monitor. There is too much water present in this sample to perform a particle count. All component wear rates are normal. Appearance is milky. There is a moderate concentration of water present in the oil. Light concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid.

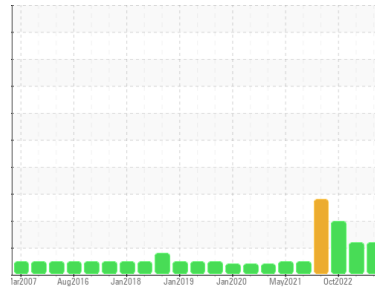
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
No. 1 Paper Machine
 Machine Id
1 PM 1ST Press Bottom Roll Drive Str.#5 (S/N MO27565-5)
 Component
Gear Unit
 Fluid
ROYAL PURPLE SYNERGY 90/220 (19 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 high amount of silt (particulates < 14 microns in size) present in the oil.

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 | RP0038223 | RP0031046 | RP0031076 |
| Sample Date | Client Info | 29 Sep 2023 | 27 Dec 2022 | 14 Oct 2022 |
| Machine Age | hrs | Client Info | 0 | 0 |
| Oil Age | hrs | Client Info | 0 | 0 |
| Oil Changed | Client Info | N/A | N/A | N/A |
| Sample Status | | ABNORMAL | ABNORMAL | ABNORMAL |

WEAR METALS

| method | limit/base | current | history1 | history2 | |
|----------|------------|------------------|--------------|----------|----|
| Iron | ppm | ASTM D5185m >150 | 86 | 50 | 37 |
| Chromium | ppm | ASTM D5185m >10 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m >10 | <1 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m >25 | 0 | <1 | <1 |
| Lead | ppm | ASTM D5185m >100 | <1 | <1 | <1 |
| Copper | ppm | ASTM D5185m >50 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185m >10 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | <1 | 0 | <1 |

ADDITIVES

| method | limit/base | current | history1 | history2 | |
|------------|------------|-----------------|--------------|----------|------|
| Boron | ppm | ASTM D5185m | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | 0 | 3 | 6 |
| Molybdenum | ppm | ASTM D5185m | <1 | <1 | <1 |
| Manganese | ppm | ASTM D5185m | 2 | 1 | <1 |
| Magnesium | ppm | ASTM D5185m | 0 | 0 | <1 |
| Calcium | ppm | ASTM D5185m | 55 | 67 | 82 |
| Phosphorus | ppm | ASTM D5185m 370 | 875 | 842 | 850 |
| Zinc | ppm | ASTM D5185m | 999 | 977 | 1110 |

CONTAMINANTS

| method | limit/base | current | history1 | history2 | |
|-----------|------------|------------------|--------------|----------|---------|
| Silicon | ppm | ASTM D5185m >50 | 4 | 4 | 4 |
| Sodium | ppm | ASTM D5185m | 2 | 3 | <1 |
| Potassium | ppm | ASTM D5185m >20 | <1 | 0 | 0 |
| Water | % | ASTM D6304 >0.1 | 0.061 | 0.037 | ▲ 0.415 |
| ppm Water | ppm | ASTM D6304 >1000 | 611.7 | 372.7 | ▲ 4150 |

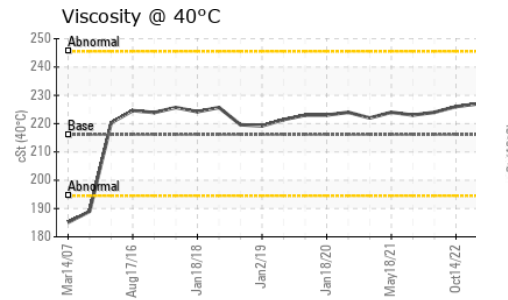
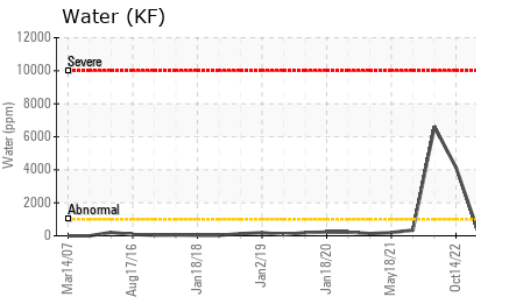
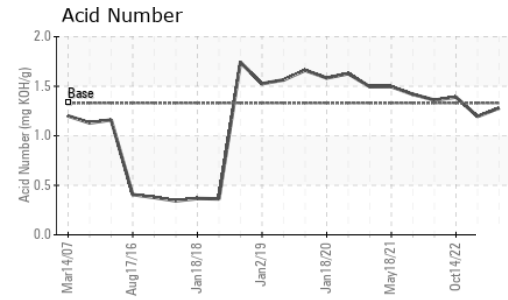
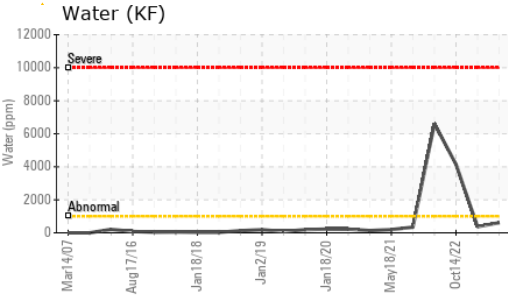
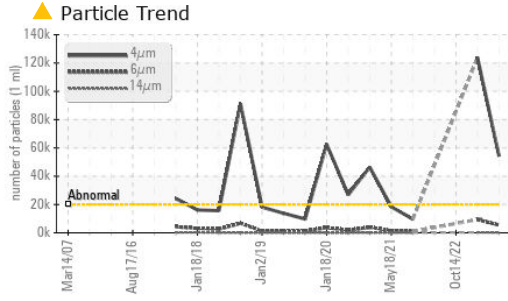
FLUID CLEANLINESS

| method | limit/base | current | history1 | history2 |
|-----------------|------------------------|-------------------|------------|----------|
| Particles >4µm | ASTM D7647 >20000 | ▲ 54174 | ▲ 123799 | --- |
| Particles >6µm | ASTM D7647 >5000 | ▲ 5517 | ▲ 9345 | --- |
| Particles >14µm | ASTM D7647 >640 | 58 | 273 | --- |
| Particles >21µm | ASTM D7647 >160 | 5 | 25 | --- |
| Particles >38µm | ASTM D7647 >40 | 0 | 0 | --- |
| Particles >71µm | ASTM D7647 >10 | 0 | 0 | --- |
| Oil Cleanliness | ISO 4406 (c) >21/19/16 | ▲ 23/20/13 | ▲ 24/20/15 | --- |

FLUID DEGRADATION

| method | limit/base | current | history1 | history2 | |
|------------------|------------|-----------------|-------------|----------|------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 1.33 | 1.28 | 1.195 | 1.39 |

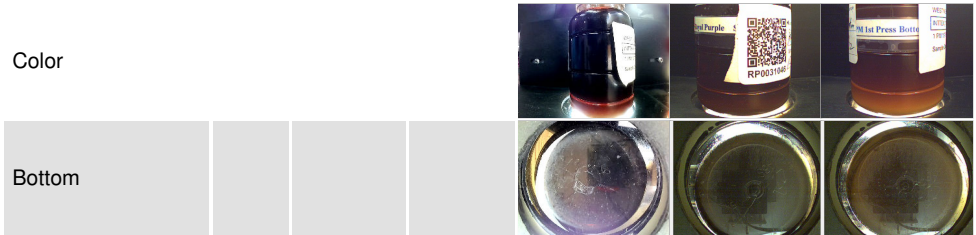
OIL ANALYSIS REPORT



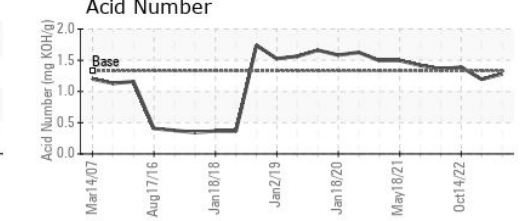
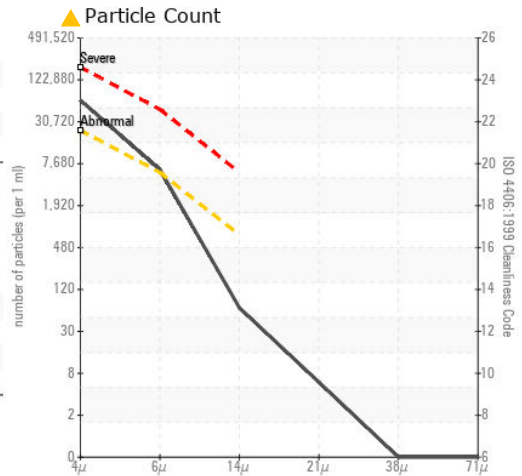
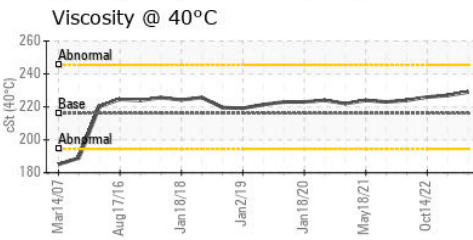
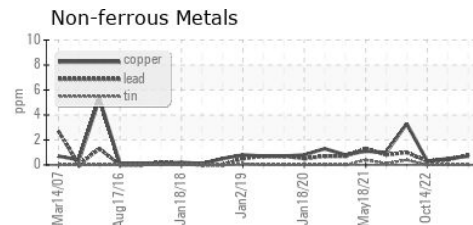
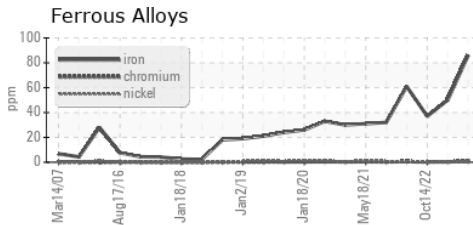
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | ▲ MODER |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.1 | NEG | 0.2% |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 216.1 | 229 | 227 |

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



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0038223 **Received** : 03 Oct 2023
Lab Number : 05968340 **Diagnosed** : 05 Oct 2023
Unique Number : 10674891 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: 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)

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