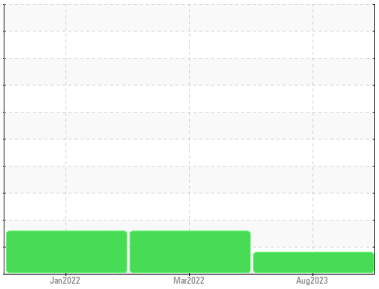
# PROBLEM SUMMARY

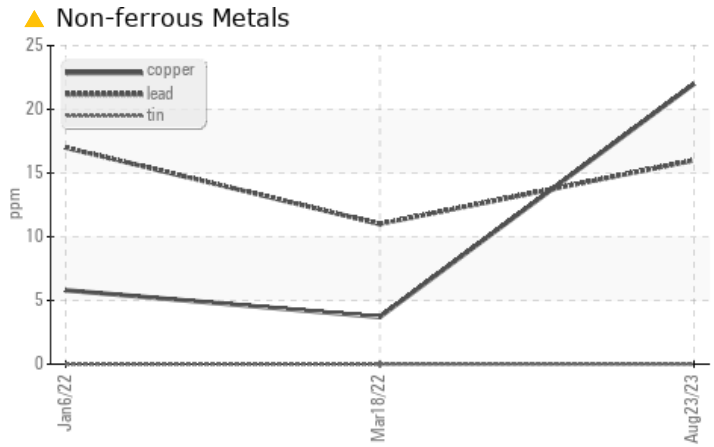
**Sample Rating Trend**




**WEAR**

Machine Id
## MHTF_P7 MHTF_P7_M7
Component
**Drive End Bearing**
Fluid
**ROYAL PURPLE SYNFILM GT 32 (--- GAL)**

## COMPONENT CONDITION SUMMARY




## 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 |
| Copper | ppm | ASTM D5185m | >20 | ▲ **22** | 4 | 6 |

**Customer Id:** ENEAST
**Sample No.:** RP0033069
**Lab Number:** 05935569
**Test Package:** IND 2

*To manage this report scan the QR code*

*To discuss the diagnosis or test data:*
Don Baldridge +1
don.b505@comcast.net

*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

**18 Mar 2022 Diag: Doug Bogart**

VISUAL METAL

We suspect abnormal contamination may be due to sampling method. Resample at the next service interval to monitor.Moderate concentration of visible metal present. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

**view report**

**06 Jan 2022 Diag: Angela Borella**

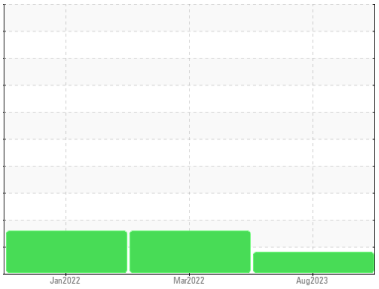
VISUAL METAL

We suspect abnormal contamination may be due to sampling method. Resample at the next service interval to monitor.Moderate concentration of visible metal present. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

**view report**

# OIL ANALYSIS REPORT

Sample Rating Trend




**WEAR**

Machine Id
## MHTF_P7 MHTF_P7_M7
Component
**Drive End Bearing**
Fluid
**ROYAL PURPLE SYNFILM GT 32 (--- GAL)**

## DIAGNOSIS

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

**▲ Wear**
The copper level is abnormal. All other component wear rates are normal.

**Contamination**
There is no indication of any contamination 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 | | **RP0033069** | RP0012757 | RP0012771 |
| Sample Date | | Client Info | | **23 Aug 2023** | 18 Mar 2022 | 06 Jan 2022 |
| 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 | | | | **ABNORMAL** | ABNORMAL | ABNORMAL |

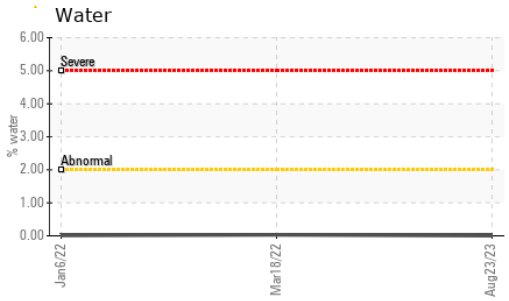
| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| PQ | | ASTM D8184 | | **12** | --- | --- |
| Iron | ppm | ASTM D5185m | >20 | **2** | <1 | 2 |
| Chromium | ppm | ASTM D5185m | >20 | **0** | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >20 | **<1** | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Silver | ppm | ASTM D5185m | | **<1** | 1 | <1 |
| Aluminum | ppm | ASTM D5185m | >20 | **0** | 0 | 2 |
| Lead | ppm | ASTM D5185m | >20 | **16** | 11 | 17 |
| Copper | ppm | ASTM D5185m | >20 | ▲ **22** | 4 | 6 |
| Tin | ppm | ASTM D5185m | >20 | **0** | 0 | 0 |
| Antimony | ppm | ASTM D5185m | | **---** | --- | 0 |
| Vanadium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | **<1** | 0 | 0 |

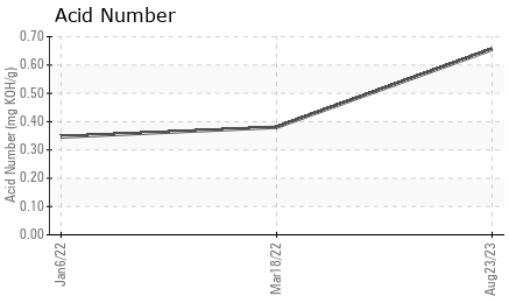
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **0** | <1 | <1 |
| Barium | ppm | ASTM D5185m | | **1** | 2 | 0 |
| Molybdenum | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | **0** | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | | **<1** | 52 | 10 |
| Calcium | ppm | ASTM D5185m | | **0** | 0 | <1 |
| Phosphorus | ppm | ASTM D5185m | | **23** | 20 | 27 |
| Zinc | ppm | ASTM D5185m | | **63** | 14 | 18 |

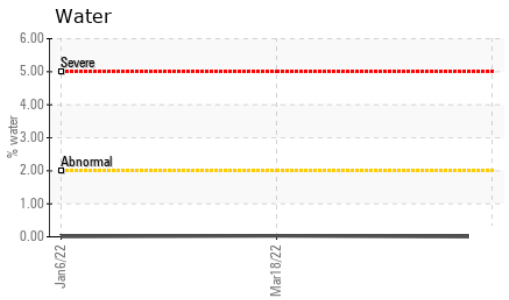
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >15 | **6** | 2 | 5 |
| Sodium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | **<1** | <1 | <1 |
| Water | % | ASTM D6304 | >2 | **0.002** | 0.026 | 0.009 |
| ppm Water | ppm | ASTM D6304 | | **24.8** | 265.6 | 94.0 |

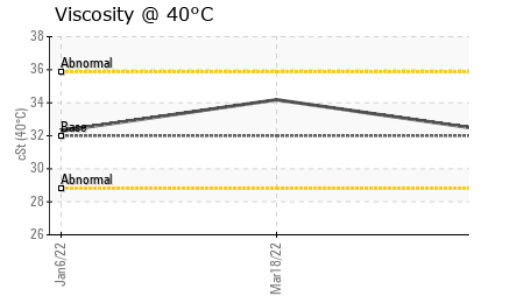
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | **0.655** | 0.38 | 0.346 |

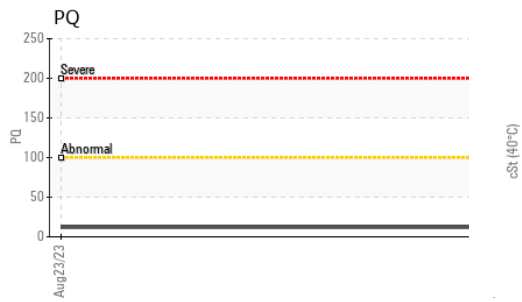
# OIL ANALYSIS REPORT



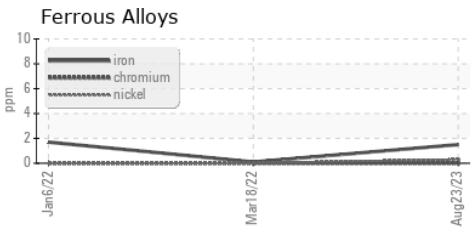



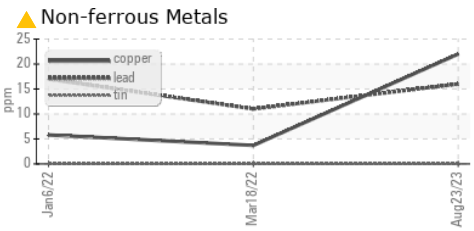

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **LIGHT** | ▲ MODER | ▲ MODER |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Silt | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Debris | scalar | *Visual | NONE | **NONE** | ▲ MODER | ▲ MODER |
| 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 | >2 | **NEG** | NEG | NEG |
| Free Water | scalar | *Visual | | **NEG** | NEG | NEG |

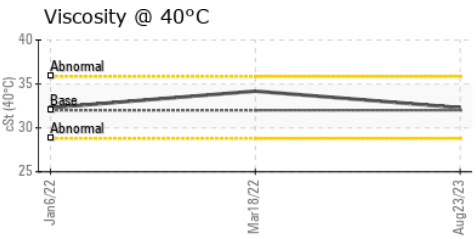
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 32 | **32.3** | 34.18 | 32.3 |

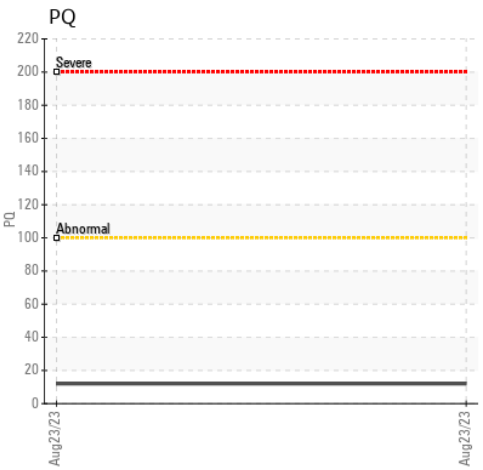
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  | | |
| Bottom | | |  | | |

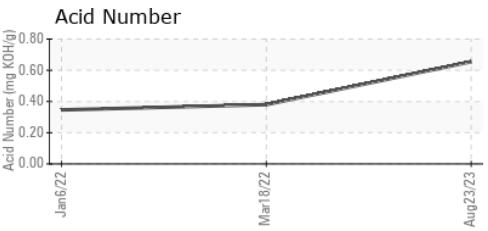
## GRAPHS




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : RP0033069 **Received** : 25 Aug 2023
**Lab Number** : 05935569 **Diagnosed** : 28 Aug 2023
**Unique Number** : 10620840 **Diagnostician** : Don Baldridge
**Test Package** : IND 2 ( Additional Tests: PQ )

*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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Report Id: ENEAST [WUSCAR] 05935569 (Generated: 08/28/2023 15:11:25) Rev: 1

Submitted By: Philip Geibler