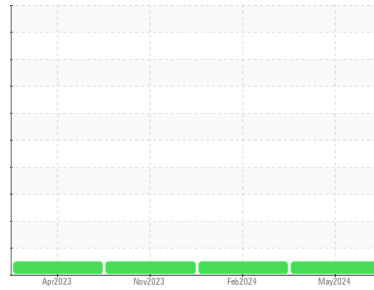




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

MLU-1

Component

Outboard Pump

Fluid

ROYAL PURPLE SYNFILM GT 32 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The water content is negligible. 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 | | | RP0039917 | RP0036097 | RP0037132 |
| Sample Date | Client Info | | | 23 May 2024 | 19 Feb 2024 | 01 Nov 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 | NORMAL |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m | >90 | 2 | 0 | 6 |
| Chromium | ppm | ASTM D5185m | >5 | <1 | <1 | 0 |
| Nickel | ppm | ASTM D5185m | >5 | <1 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | >3 | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >3 | 1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >7 | 1 | 0 | <1 |
| Lead | ppm | ASTM D5185m | >12 | 5 | 2 | 2 |
| Copper | ppm | ASTM D5185m | >30 | 14 | 15 | 9 |
| Tin | ppm | ASTM D5185m | >9 | 1 | 0 | 1 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | <1 | 0 | 0 |

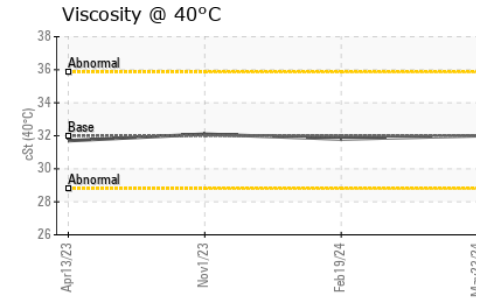
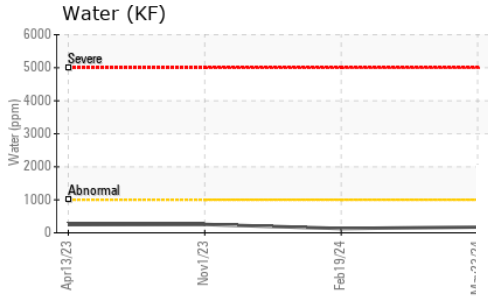
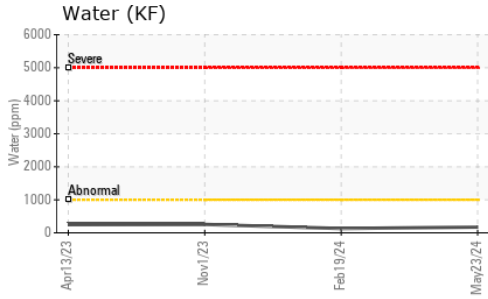
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | | 66 | 57 | 85 |
| Calcium | ppm | ASTM D5185m | | 0 | 0 | 4 |
| Phosphorus | ppm | ASTM D5185m | | 5 | 0 | 4 |
| Zinc | ppm | ASTM D5185m | | 0 | 0 | 0 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m | >60 | 22 | 19 | 14 |
| Sodium | ppm | ASTM D5185m | | 23 | 10 | 6 |
| Potassium | ppm | ASTM D5185m | >20 | 1 | 0 | <1 |
| Water | % | ASTM D6304 | >.1 | 0.017 | 0.013 | 0.025 |
| ppm Water | ppm | ASTM D6304 | >1000 | 175 | 130 | 255 |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.31 | 0.31 | 0.35 |

| 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 | LIGHT |
| 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 | >.1 | 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 | 32 | 32.0 | 31.8 | 32.1 |

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

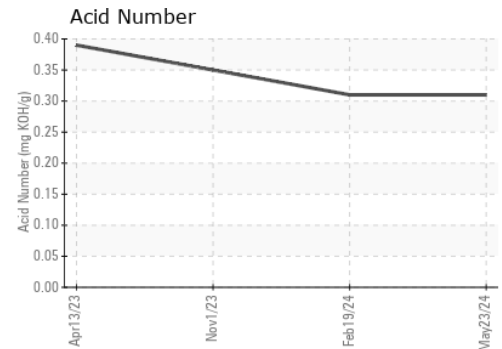
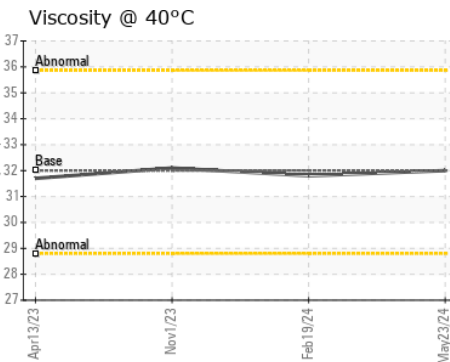
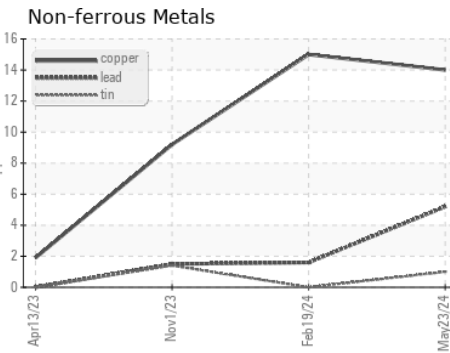
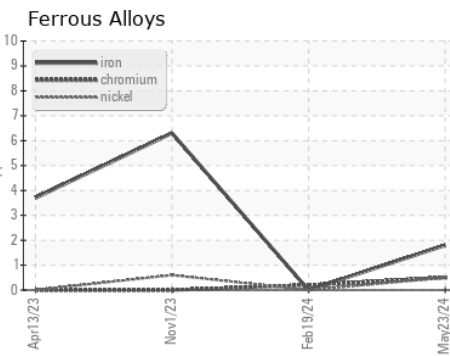
Color



Bottom



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0039917
Lab Number : **06194071**
Unique Number : 11056194
Test Package : IND 2

Received : 29 May 2024
Tested : 30 May 2024
Diagnosed : 31 May 2024 - Angela Borella

ENERGY TRANSFER - LONGVIEW
 1010 COX DIARY RD
 LONGVIEW, TX
 US 75601
 Contact: Service Manager

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)

T:
F: