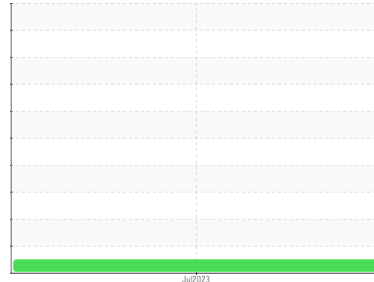




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
PAO FLUSHING PUMP 0827605

Component
Hydraulic System

Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Discrete particle counts [100 ml] 5-15µm = 36800, 15-25µm = 700, 25-50µm = 100, 50-100µm = 0, >100µm = 0. The system cleanliness is acceptable for your target ISO 4406 cleanliness code.

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 | | WC0827605 | --- | --- |
| Sample Date | Client Info | | 13 Jul 2023 | --- | --- |
| Machine Age | hrs | Client Info | 0 | --- | --- |
| Oil Age | hrs | Client Info | 0 | --- | --- |
| Oil Changed | Client Info | | N/A | --- | --- |
| Sample Status | | | NORMAL | --- | --- |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >20 | 0 | --- | --- |
| Chromium | ppm | ASTM D5185m >20 | 0 | --- | --- |
| Nickel | ppm | ASTM D5185m >20 | <1 | --- | --- |
| Titanium | ppm | ASTM D5185m | 0 | --- | --- |
| Silver | ppm | ASTM D5185m | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185m >20 | 0 | --- | --- |
| Lead | ppm | ASTM D5185m >20 | 0 | --- | --- |
| Copper | ppm | ASTM D5185m >20 | <1 | --- | --- |
| Tin | ppm | ASTM D5185m >20 | 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 | 0 | --- | --- |
| Calcium | ppm | ASTM D5185m | 0 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | 0 | --- | --- |
| Zinc | ppm | ASTM D5185m | 0 | --- | --- |
| Sulfur | ppm | ASTM D5185m | 4 | --- | --- |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >15 | 0 | --- | --- |
| Sodium | ppm | ASTM D5185m | 0 | --- | --- |
| Potassium | ppm | ASTM D5185m >20 | <1 | --- | --- |
| Water | % | ASTM D6304 >0.05 | 0.003 | --- | --- |
| ppm Water | ppm | ASTM D6304 >500 | 25.1 | --- | --- |

FLUID CLEANLINESS

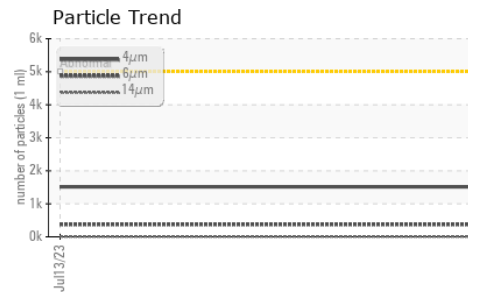
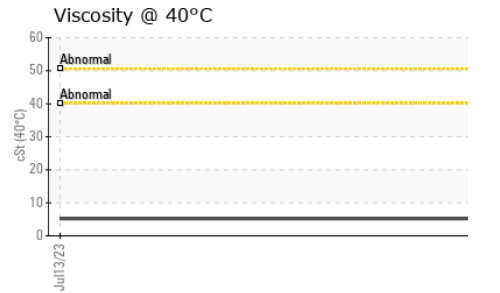
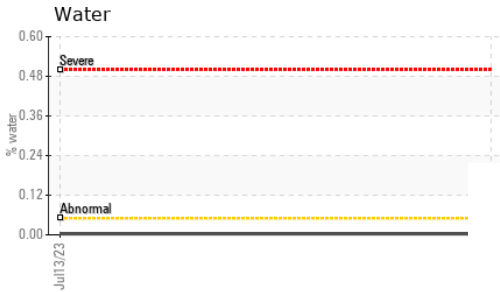
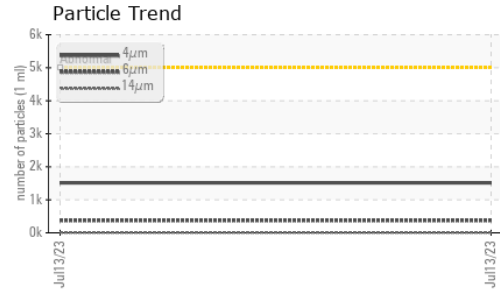
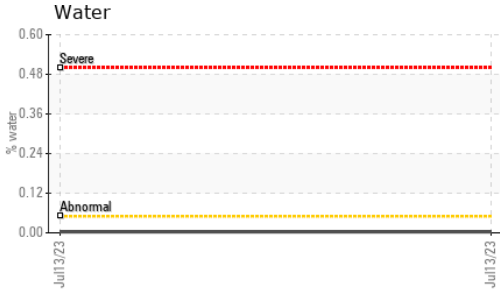
| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm | ASTM D7647 | >5000 | 1512 | --- | --- |
| Particles >6µm | ASTM D7647 | >1300 | 376 | --- | --- |
| Particles >14µm | ASTM D7647 | >160 | 8 | --- | --- |
| Particles >21µm | ASTM D7647 | >40 | 1 | --- | --- |
| Particles >38µm | ASTM D7647 | >10 | 0 | --- | --- |
| Particles >71µm | ASTM D7647 | >3 | 0 | --- | --- |
| Oil Cleanliness | ISO 4406 (c) | >19/17/14 | 18/16/10 | --- | --- |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------|--------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.046 | --- | --- |



OIL ANALYSIS REPORT



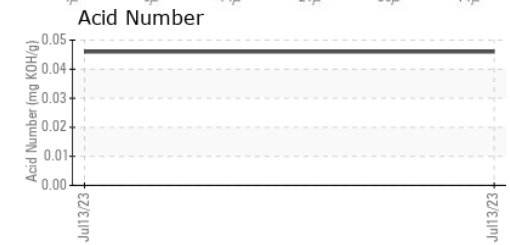
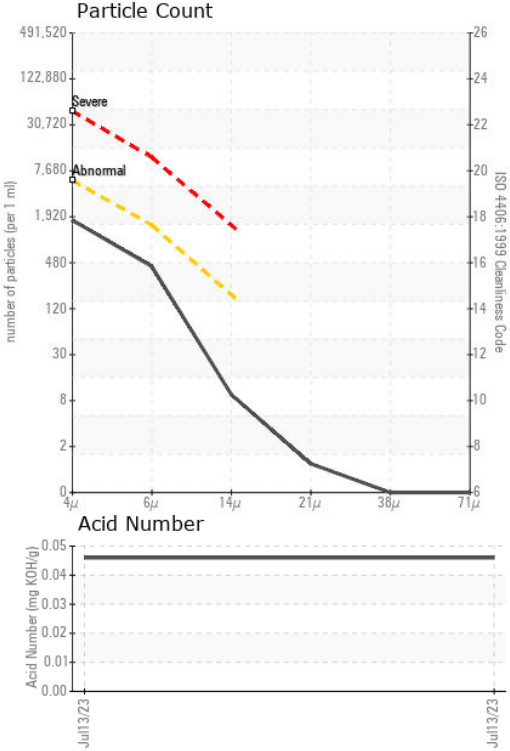
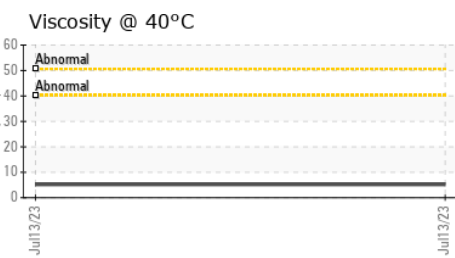
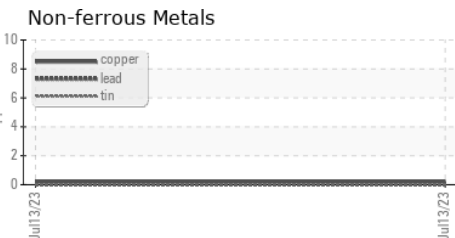
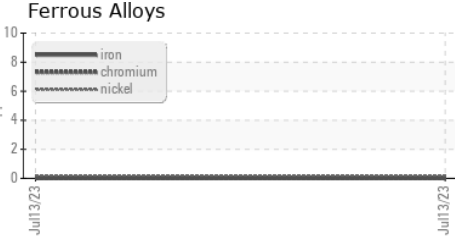
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- |
| Precipitate | scalar | *Visual | NONE | NONE | --- |
| Silt | scalar | *Visual | NONE | NONE | --- |
| Debris | scalar | *Visual | NONE | NONE | --- |
| Sand/Dirt | scalar | *Visual | NONE | NONE | --- |
| Appearance | scalar | *Visual | NORML | NORML | --- |
| Odor | scalar | *Visual | NORML | NORML | --- |
| Emulsified Water | scalar | *Visual | >0.05 | NEG | --- |
| Free Water | scalar | *Visual | | NEG | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 5.2 | --- | --- |

| 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. : WC0827605 **Received** : 14 Jul 2023
Lab Number : 05899502 **Diagnosed** : 18 Jul 2023
Unique Number : 10560858 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF)

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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