



OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
PAO FLUSHING PUMP 0954858

Component
Hydraulic System

Fluid
 {not provided} (--- 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 = 2800, 15-25µm = 100, 25-50µm = 100, 50-100µm = 0, >100µm = 0. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

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 | WC0954858 | --- | --- |
| Sample Date | Client Info | 18 Jun 2024 | --- | --- |
| 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 | 0 | --- | --- |
| 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 | | <1 | --- | --- |
| 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 | | 1 | --- | --- |
| Zinc ppm ASTM D5185m | | 11 | --- | --- |
| Sulfur ppm ASTM D5185m | | 22 | --- | --- |

CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|---------------------------|------------|--------------|----------|----------|
| Silicon ppm ASTM D5185m | >15 | 0 | --- | --- |
| Sodium ppm ASTM D5185m | | 1 | --- | --- |
| Potassium ppm ASTM D5185m | >20 | 0 | --- | --- |
| Water % ASTM D6304 | >0.05 | 0.001 | --- | --- |
| ppm Water ppm ASTM D6304 | >500 | 13 | --- | --- |

FLUID CLEANLINESS

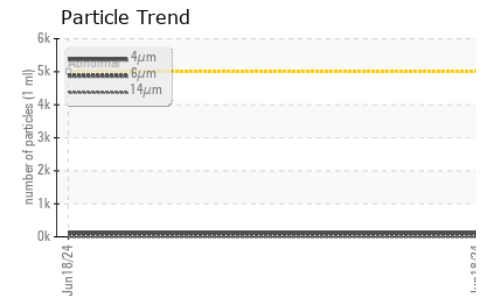
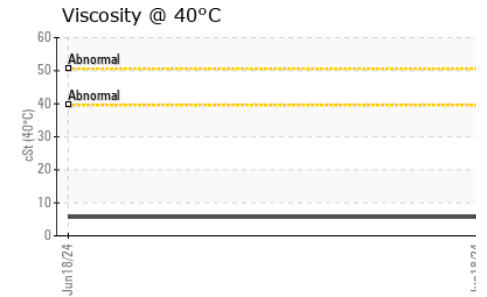
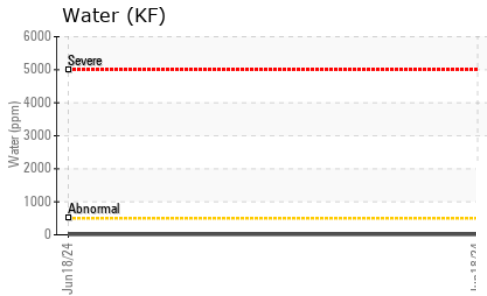
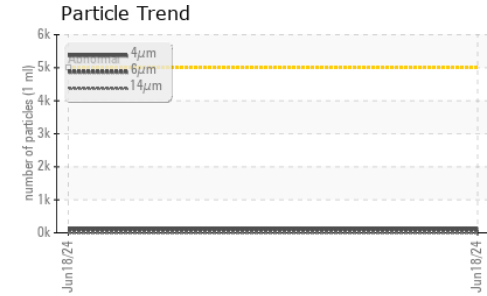
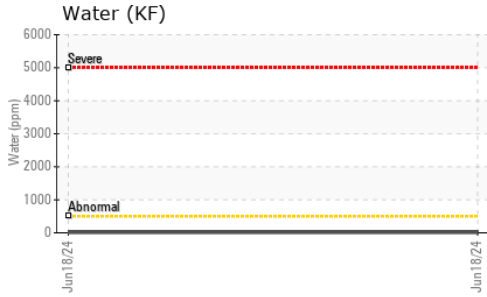
| method | limit/base | current | history1 | history2 |
|------------------------------|------------|----------------|----------|----------|
| Particles >4µm ASTM D7647 | >5000 | 115 | --- | --- |
| Particles >6µm ASTM D7647 | >1300 | 30 | --- | --- |
| Particles >14µm ASTM D7647 | >160 | 2 | --- | --- |
| 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 | 14/12/9 | --- | --- |

FLUID DEGRADATION

| method | limit/base | current | history1 | history2 |
|--------------------------------------|------------|--------------|----------|----------|
| Acid Number (AN) mg KOH/g ASTM D8045 | | 0.366 | --- | --- |



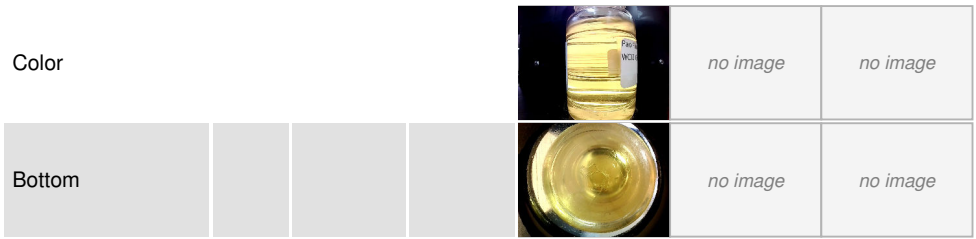
OIL ANALYSIS REPORT



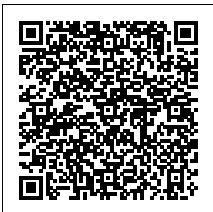
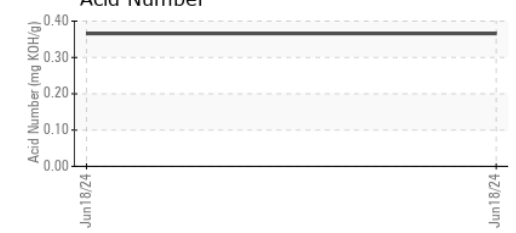
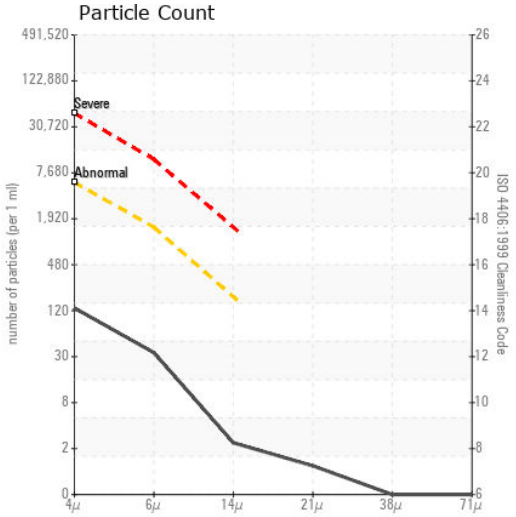
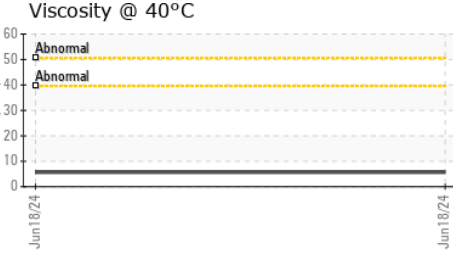
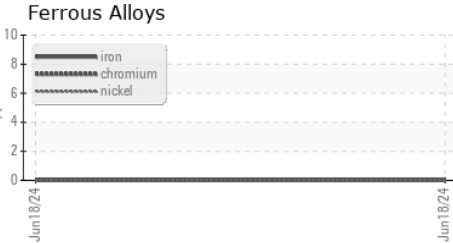
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|--------------|----------|
| White Metal | scalar | *Visual | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- |
| Precipitate | scalar | *Visual | NONE | NONE | --- |
| 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 | 5.67 | --- | --- |

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



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0954858 **Received** : 18 Jun 2024
Lab Number : **06213958** **Tested** : 20 Jun 2024
Unique Number : 11086822 **Diagnosed** : 21 Jun 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF)

TAG ENGINEERING INC
 6707 WHITESTONE RD
 BALTIMORE, MD
 US 21207
 Contact: MIKE STEVENSON
 mike@tagengineering.com
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 F: (410)265-8690

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)