

OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
BREAK DOWN

Component
Top Hydraulic System

Fluid
FUCHS RENOLIN UNISYN CLP 220 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. Please note that this is a corrected copy.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|----------|----------|
| Sample Number | Client Info | | FCH0000219 | --- | --- |
| Sample Date | Client Info | | 13 Jun 2024 | --- | --- |
| Machine Age | hrs | Client Info | 0 | --- | --- |
| Oil Age | hrs | Client Info | 0 | --- | --- |
| Oil Changed | Client Info | | N/A | --- | --- |
| Sample Status | | | ABNORMAL | --- | --- |

CONTAMINATION

| | method | limit/base | current | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >0.05 | NEG | --- | --- |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-------------|---------|--------------|----------|
| Iron | ppm | ASTM D5185m | >20 | 26 | --- |
| 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 | <1 | --- |
| Lead | ppm | ASTM D5185m | >20 | 0 | --- |
| Copper | ppm | ASTM D5185m | >20 | 0 | --- |
| Tin | ppm | ASTM D5185m | >20 | 0 | --- |
| Vanadium | ppm | ASTM D5185m | | <1 | --- |
| Cadmium | ppm | ASTM D5185m | | <1 | --- |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|-------------|---------|--------------|----------|
| Boron | ppm | ASTM D5185m | | 4 | --- |
| Barium | ppm | ASTM D5185m | | 4 | --- |
| Molybdenum | ppm | ASTM D5185m | | 0 | --- |
| Manganese | ppm | ASTM D5185m | | <1 | --- |
| Magnesium | ppm | ASTM D5185m | | <1 | --- |
| Calcium | ppm | ASTM D5185m | | 23 | --- |
| Phosphorus | ppm | ASTM D5185m | | 223 | --- |
| Zinc | ppm | ASTM D5185m | | 11 | --- |
| Sulfur | ppm | ASTM D5185m | | 6641 | --- |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-------------|---------|-----------|----------|
| Silicon | ppm | ASTM D5185m | >15 | 13 | --- |
| Sodium | ppm | ASTM D5185m | | 0 | --- |
| Potassium | ppm | ASTM D5185m | >20 | 1 | --- |

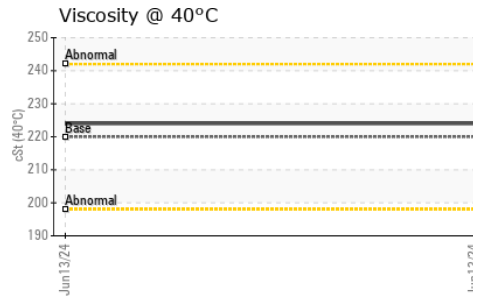
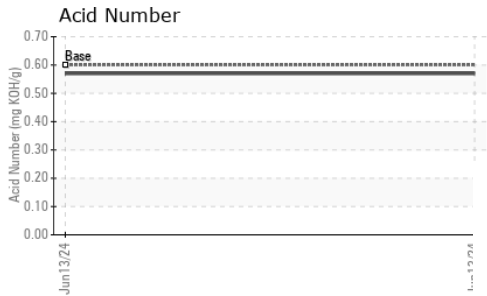
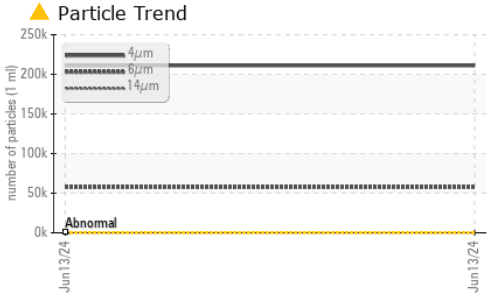
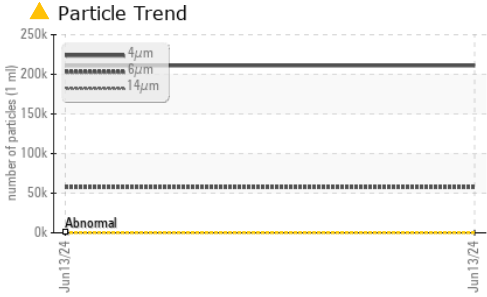
FLUID CLEANLINESS

| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|-------------------|----------|----------|
| Particles >4µm | ASTM D7647 | >160 | ▲ 210988 | --- | --- |
| Particles >6µm | ASTM D7647 | | ▲ 57568 | --- | --- |
| Particles >14µm | ASTM D7647 | | ▲ 633 | --- | --- |
| Particles >21µm | ASTM D7647 | >3 | ▲ 47 | --- | --- |
| Particles >38µm | ASTM D7647 | >3 | 1 | --- | --- |
| Particles >71µm | ASTM D7647 | >3 | 1 | --- | --- |
| Oil Cleanliness | ISO 4406 (c) | >14/6/4 | ▲ 25/23/16 | --- | --- |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------|---------|-------------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.6 | 0.57 | --- |

OIL ANALYSIS REPORT



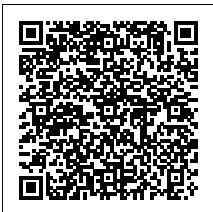
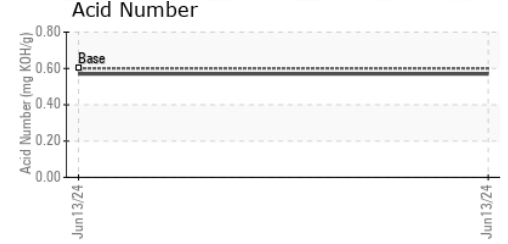
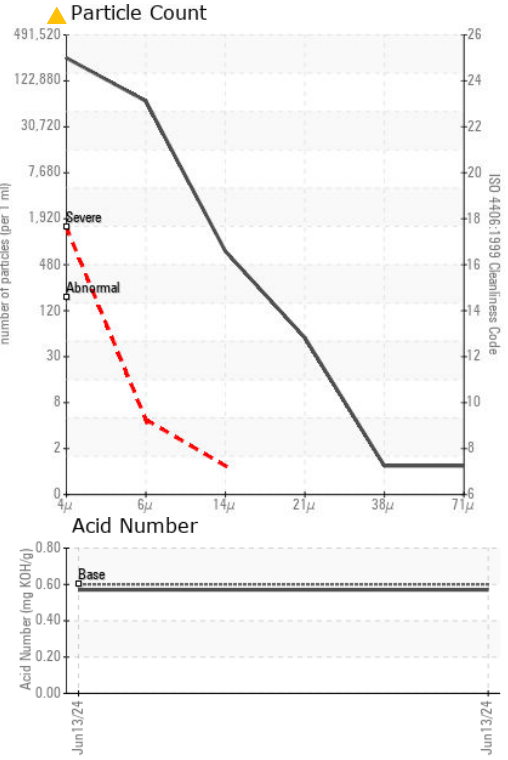
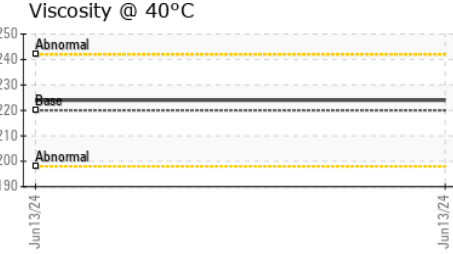
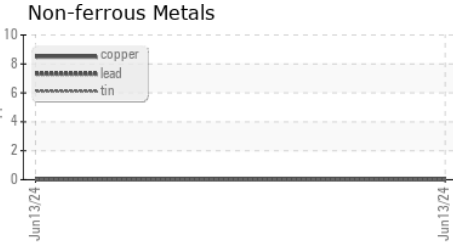
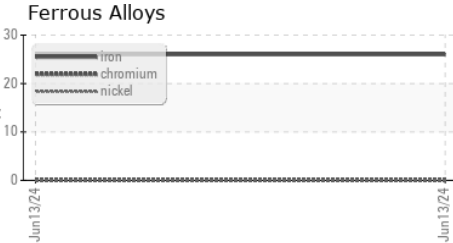
| VISUAL | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|----------|----------|-----|
| White Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Precipitate | scalar | *Visual | 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 220 | 224 | --- | --- |

| 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. : FCH0000219
Lab Number : **06210032**
Unique Number : 11082896
Test Package : PLANT

Received : 14 Jun 2024
Tested : 27 Jun 2024
Diagnosed : 27 Jun 2024 - Doug Bogart

ATLAS TUBE
 5661 E STATE STREET HWY 137
 BLYTHEVILLE, AR
 US 72315
 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: