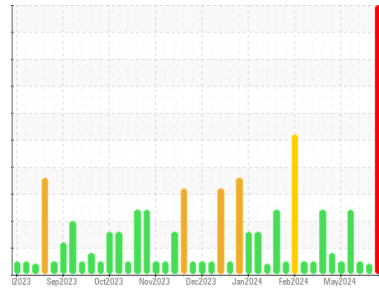




PROBLEM SUMMARY

Sample Rating Trend

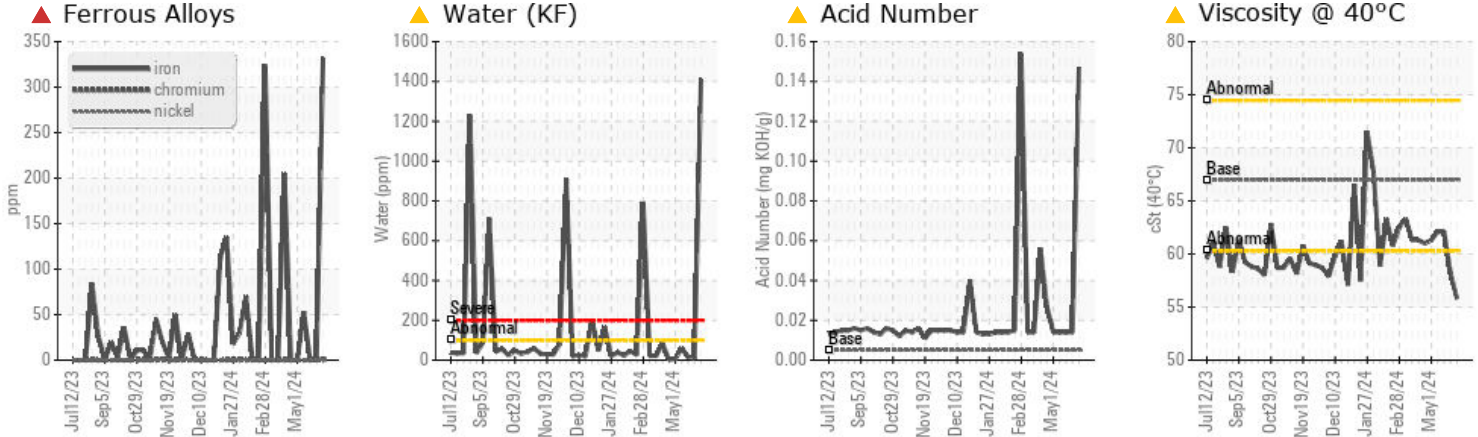


WEAR



Machine Id
TYSLOG RECYCLED NH3 (S/N M902820A)
Component
Refrigeration Compressor
Fluid
USPI 1009-68 SC (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

This is a baseline read-out on the submitted sample. We were unable to perform a particle count due to a high concentration of particles present in this sample. BARREL 6 BEFORE FILTRATION

PROBLEMATIC TEST RESULTS

| Sample Status | | | | SEVERE | ATTENTION | NORMAL |
|------------------|----------|-------------|-------|----------------|-----------|--------|
| Iron | ppm | ASTM D5185m | >8 | ▲ 332 | <1 | 0 |
| Water | % | ASTM D6304 | >0.01 | ▲ 0.141 | 0.001 | 0.002 |
| ppm Water | ppm | ASTM D6304 | >100 | ▲ 1410 | 9 | 16 |
| Acid Number (AN) | mg KOH/g | ASTM D974 | 0.005 | ▲ 0.147 | 0.014 | 0.014 |
| Silt | scalar | *Visual | NONE | ▲ MODER | NONE | NONE |
| Debris | scalar | *Visual | NONE | ▲ MODER | NONE | NONE |
| Emulsified Water | scalar | *Visual | >0.01 | ▲ 0.2% | NEG | NEG |
| Visc @ 40°C | cSt | ASTM D445 | 67 | ▲ 55.8 | ● 58.2 | 62.1 |

Customer Id: **TYSLOG**
Sample No.: **USP0012486**
Lab Number: **06203424**
Test Package: **IND 2**



To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

| Action | Status | Date | Done By | Description |
|--------|--------|------|---------|---|
| Alert | --- | --- | ? | We were unable to perform a particle count due to a high concentration of particles present in this sample. |

HISTORICAL DIAGNOSIS

VISCOSITY



02 Jun 2024 Diag: Doug Bogart

This is a baseline read-out on the submitted sample. BARREL 5 AFTER FILTERING There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The oil viscosity is lower than normal. Confirmed. The AN level is acceptable for this fluid.

view report



NORMAL



28 May 2024 Diag: Doug Bogart

This is a baseline read-out on the submitted sample. BARREL 33 AFTER There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



WEAR



09 May 2024 Diag: Doug Bogart

This is a baseline read-out on the submitted sample. BARREL 5 BEFORE FILTThe iron level is abnormal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid.

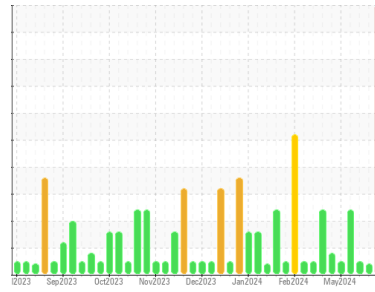
view report





OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
TYSLOG RECYCLED NH3 (S/N M902820A)
 Component
Refrigeration Compressor
 Fluid
USPI 1009-68 SC (--- GAL)

DIAGNOSIS

▲ Recommendation

This is a baseline read-out on the submitted sample. We were unable to perform a particle count due to a high concentration of particles present in this sample. BARREL 6 BEFORE FILTRATION

▲ Wear

The iron level is severe.

▲ Contamination

Moderate concentration of visible dirt/debris present in the oil. There is a moderate amount of visible silt present in the sample. There is a light concentration of water present in the oil.

▲ Fluid Condition

The oil viscosity is lower than normal. The AN level is at the top-end of the recommended limit. Confirmed.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | USP0012486 | USP0012695 | USP0012751 |
| Sample Date | Client Info | | 06 Jun 2024 | 02 Jun 2024 | 28 May 2024 |
| 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 | | | SEVERE | ATTENTION | NORMAL |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|----------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >8 | ▲ 332 | <1 | 0 |
| Chromium | ppm | ASTM D5185m >2 | <1 | <1 | 0 |
| Nickel | ppm | ASTM D5185m | <1 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | <1 | <1 | 0 |
| Silver | ppm | ASTM D5185m >2 | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m >3 | 2 | 1 | 0 |
| Lead | ppm | ASTM D5185m >2 | <1 | <1 | 0 |
| Copper | ppm | ASTM D5185m >8 | 4 | <1 | <1 |
| Tin | ppm | ASTM D5185m >4 | <1 | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | 0 | <1 | <1 |
| Cadmium | ppm | ASTM D5185m | 0 | <1 | 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 | 0 | <1 | 0 |
| Manganese | ppm | ASTM D5185m | <1 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | <1 | 0 | 0 |
| Calcium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | 0 | 0 | 0 |
| Zinc | ppm | ASTM D5185m | 5 | 0 | 0 |
| Sulfur | ppm | ASTM D5185m 50 | 0 | 0 | 0 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|----------------|----------|----------|
| Silicon | ppm | ASTM D5185m >15 | 4 | 1 | <1 |
| Sodium | ppm | ASTM D5185m | 0 | 0 | <1 |
| Potassium | ppm | ASTM D5185m >20 | 1 | 2 | 1 |
| Water | % | ASTM D6304 >0.01 | ▲ 0.141 | 0.001 | 0.002 |
| ppm Water | ppm | ASTM D6304 >100 | ▲ 1410 | 9 | 16 |

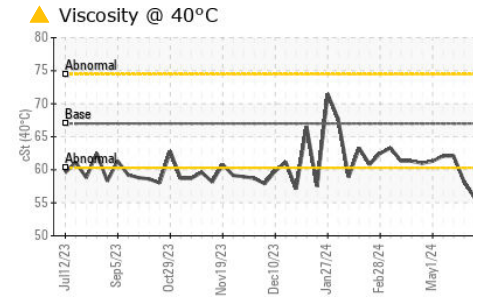
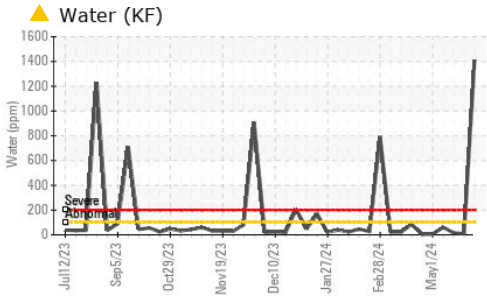
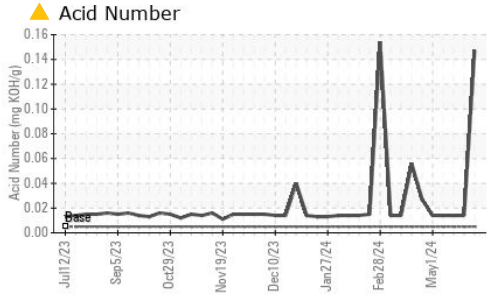
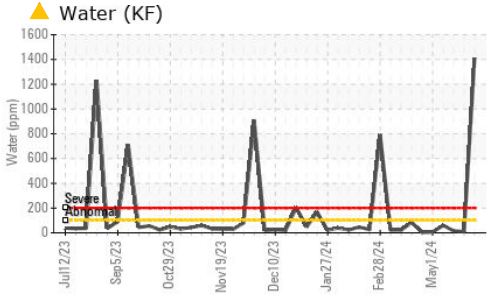
FLUID CLEANLINESS

| | method | limit/base | current | history1 | history2 |
|-----------------|------------------|------------|------------|----------|----------|
| Particles >4µm | ASTM D7647 | | --- | 1604 | 1813 |
| Particles >6µm | ASTM D7647 >2500 | | --- | 419 | 398 |
| Particles >14µm | ASTM D7647 >320 | | --- | 18 | 16 |
| Particles >21µm | ASTM D7647 >80 | | --- | 4 | 4 |
| Particles >38µm | ASTM D7647 >20 | | --- | 0 | 0 |
| Particles >71µm | ASTM D7647 >4 | | --- | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >--/18/15 | --- | 18/16/11 | 18/16/11 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|-----------------|----------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D974 0.005 | ▲ 0.147 | 0.014 | 0.014 |

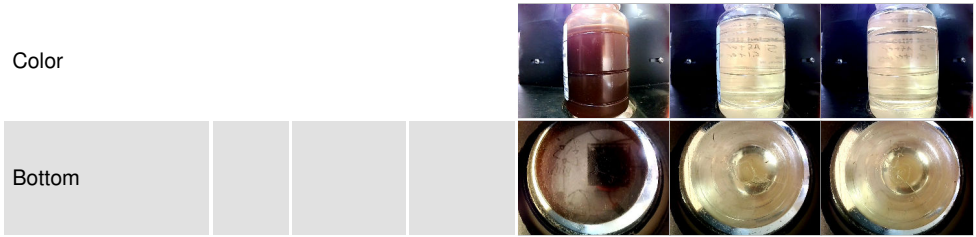
OIL ANALYSIS REPORT



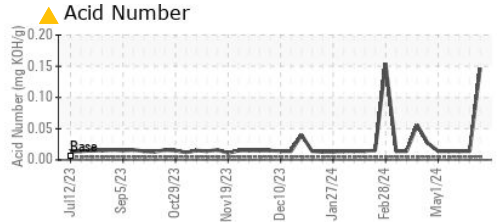
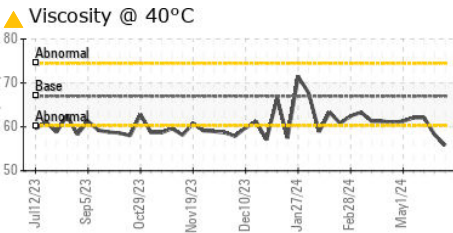
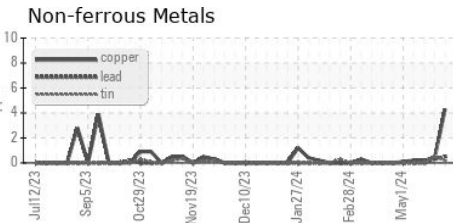
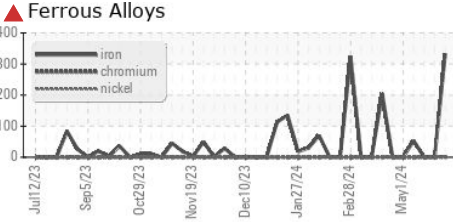
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | ▲ MODER | NONE | NONE |
| Debris | scalar | *Visual | ▲ MODER | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | ▲ 0.2% | NEG | NEG |
| Free Water | scalar | *Visual | NEG | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|--------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 67 | ▲ 55.8 | ● 58.2 | 62.1 |

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0012486 **Received** : 07 Jun 2024
Lab Number : 06203424 **Tested** : 11 Jun 2024
Unique Number : 11070885 **Diagnosed** : 11 Jun 2024 - Doug Bogart
Test Package : IND 2

TYSON-LOGANSPOUR-USP
 LOGANSPOUR, IN
 US
 Contact: RICK DUVAL

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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