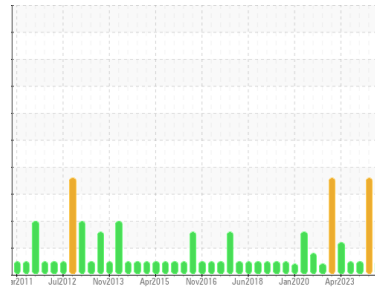




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
FRICK TYSHOUP RC-4 (S/N XJF120L0194FF)
 Component
Refrigeration Compressor
 Fluid
USPI ALT-68 SC (15 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the component. The amount and size of particulates present in the system is 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 | USP0013135 | USP0003095 | USP249907 |
| Sample Date | Client Info | 20 Jun 2024 | 02 Nov 2023 | 12 Jul 2023 |
| Machine Age | hrs | Client Info | 0 | 0 |
| Oil Age | hrs | Client Info | 0 | 0 |
| Oil Changed | Client Info | N/A | N/A | N/A |
| Sample Status | | NORMAL | ABNORMAL | NORMAL |

WEAR METALS

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

CONTAMINANTS

| method | limit/base | current | history1 | history2 | |
|-----------|------------|------------------|--------------|----------|-------|
| Silicon | ppm | ASTM D5185m >15 | 2 | 0 | <1 |
| Sodium | ppm | ASTM D5185m | 0 | 0 | <1 |
| Potassium | ppm | ASTM D5185m >20 | 1 | 0 | 3 |
| Water | % | ASTM D6304 >0.01 | 0.001 | ▲ 0.053 | 0.001 |
| ppm Water | ppm | ASTM D6304 >100 | 13 | ▲ 530 | 11.5 |

FLUID CLEANLINESS

| method | limit/base | current | history1 | history2 |
|-----------------|------------------------|-----------------|------------|----------|
| Particles >4µm | ASTM D7647 >10000 | 1317 | ▲ 26298 | 2455 |
| Particles >6µm | ASTM D7647 >2500 | 294 | ▲ 5890 | 655 |
| Particles >14µm | ASTM D7647 >320 | 12 | 148 | 32 |
| Particles >21µm | ASTM D7647 >80 | 2 | 15 | 5 |
| Particles >38µm | ASTM D7647 >20 | 0 | 1 | 0 |
| Particles >71µm | ASTM D7647 >4 | 0 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) >20/18/15 | 18/15/11 | ▲ 22/20/14 | 18/17/12 |

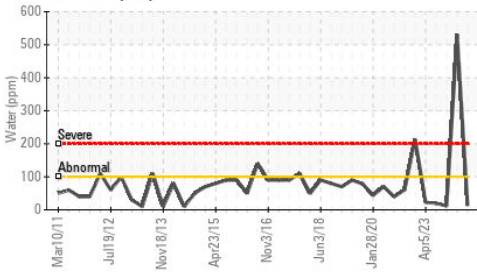
FLUID DEGRADATION

| method | limit/base | current | history1 | history2 | |
|------------------|------------|-----------------|--------------|----------|-------|
| Acid Number (AN) | mg KOH/g | ASTM D974 0.005 | 0.014 | 0.014 | 0.015 |

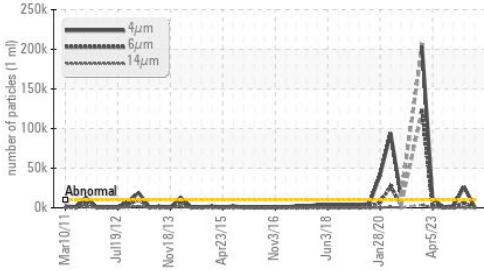


OIL ANALYSIS REPORT

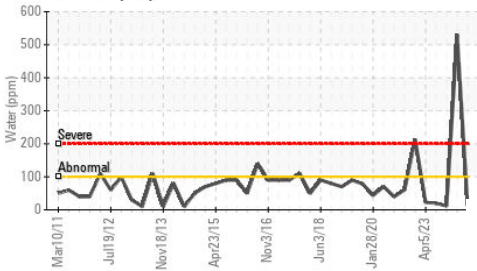
Water (KF)



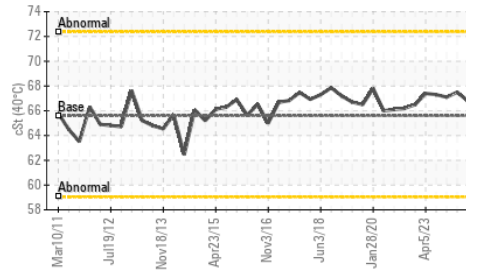
Particle Trend



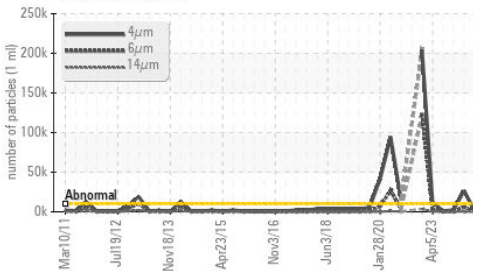
Water (KF)



Viscosity @ 40°C



Particle Trend



| 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 | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | LIGHT | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | HAZY | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.01 | 0.2% | NEG |
| Free Water | scalar | *Visual | NEG | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 65.6 | 66.8 | 67.5 |

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

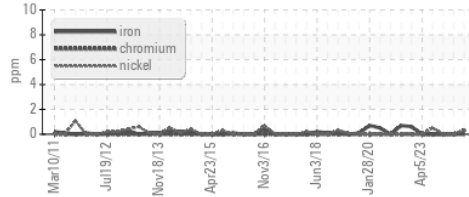
Color

Bottom

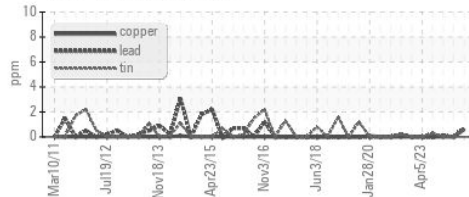


GRAPHS

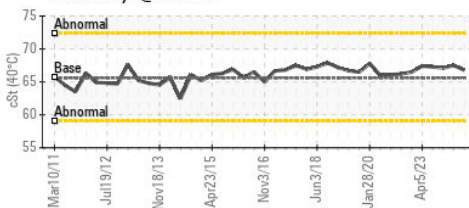
Ferrous Alloys



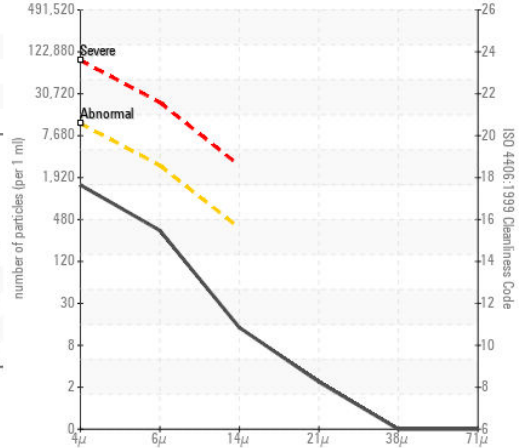
Non-ferrous Metals



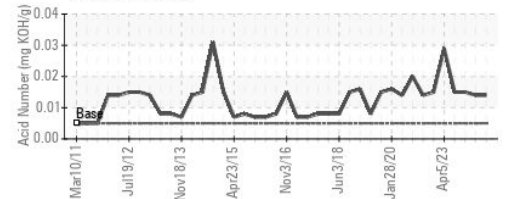
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : USP0013135
 Lab Number : 06217351
 Unique Number : 11090215
 Test Package : IND 2

TYSON-HOUSTON-USP-TYSHOUPOR
 300 PORTWELL RD.
 HOUSTON, TX
 US 77029
 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: