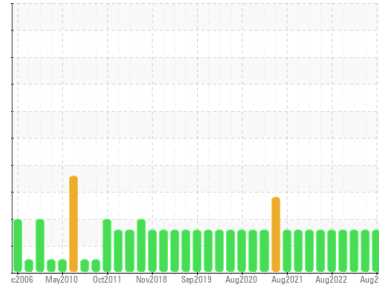




PROBLEM SUMMARY

Sample Rating Trend

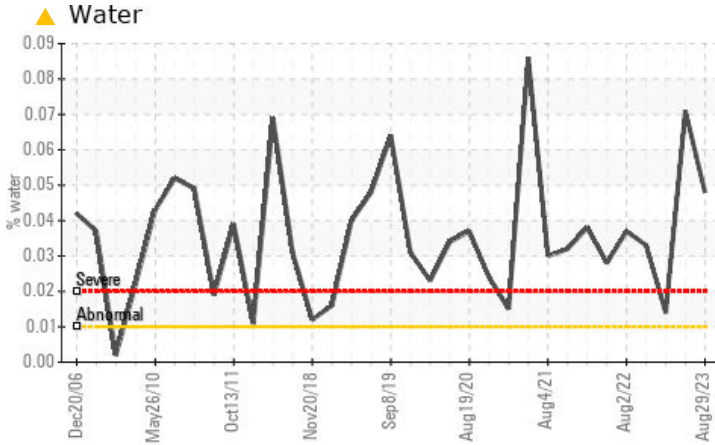


WATER



Machine Id
FES 05411014
 Component
Refrigeration Compressor
 Fluid
USPI HF SYN 220 (--- QTS)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

| Sample Status | | | | MARGINAL | MARGINAL | MARGINAL |
|---------------|-----|------------|-------|-----------------|----------|----------|
| Water | % | ASTM D6304 | >0.01 | ▲ 0.048 | ▲ 0.071 | ▲ 0.014 |
| ppm Water | ppm | ASTM D6304 | >100 | ▲ 482.4 | ▲ 913.5 | ▲ 146.5 |

Customer Id: TYSSRPP
 Sample No.: USPM29433
 Lab Number: 05938933
 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

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

24 May 2023 Diag: Doug Bogart

WATER



Resample at the next service interval to monitor. Please note that this is a corrected copy for laboratory data update for water value. All component wear rates are normal. There is a light concentration of water present 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



28 Feb 2023 Diag: Doug Bogart

WATER



Resample at the next service interval to monitor. All component wear rates are normal. There is a trace of moisture present 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



27 Oct 2022 Diag: Doug Bogart

WATER



Resample at the next service interval to monitor. All component wear rates are normal. There is a light concentration of water present 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.

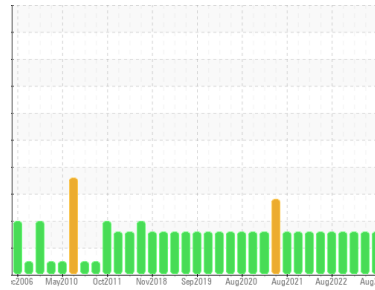
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
FES 05411014
 Component
Refrigeration Compressor
 Fluid
USPI HF SYN 220 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a light concentration of water present 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 | USPM29433 | USPM28456 | USP05780742 |
| Sample Date | Client Info | 29 Aug 2023 | 24 May 2023 | 28 Feb 2023 |
| Machine Age | days | Client Info | 0 | 0 |
| Oil Age | days | Client Info | 0 | 0 |
| Oil Changed | Client Info | N/A | N/A | N/A |
| Sample Status | | MARGINAL | MARGINAL | MARGINAL |

WEAR METALS

| method | limit/base | current | history1 | history2 |
|----------|--------------------|--------------|----------|----------|
| Iron | ppm ASTM D5185m >8 | 2 | 3 | 4 |
| Chromium | ppm ASTM D5185m >2 | 0 | 0 | 0 |
| Nickel | ppm ASTM D5185m | 0 | 0 | 0 |
| Titanium | ppm ASTM D5185m | 0 | 0 | 0 |
| Silver | ppm ASTM D5185m >2 | 0 | 0 | 0 |
| Aluminum | ppm ASTM D5185m >3 | <1 | <1 | 0 |
| Lead | ppm ASTM D5185m >2 | 0 | 0 | 0 |
| Copper | ppm ASTM D5185m >8 | 0 | 0 | 0 |
| Tin | ppm ASTM D5185m >4 | <1 | 0 | 0 |
| Vanadium | ppm ASTM D5185m | 0 | 0 | 0 |
| Cadmium | ppm ASTM D5185m | 0 | 0 | 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 | 0 | 0 |
| Manganese | ppm ASTM D5185m | 0 | <1 | 0 |
| Magnesium | ppm ASTM D5185m | 0 | 0 | 0 |
| Calcium | ppm ASTM D5185m | 0 | 0 | 0 |
| Phosphorus | ppm ASTM D5185m | <1 | 1 | 0 |
| Zinc | ppm ASTM D5185m | 0 | 0 | 0 |
| Sulfur | ppm ASTM D5185m | 0 | 11 | 11 |

CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|-----------|---------------------|----------------|----------|----------|
| Silicon | ppm ASTM D5185m >15 | <1 | 0 | 2 |
| Sodium | ppm ASTM D5185m | 0 | 0 | <1 |
| Potassium | ppm ASTM D5185m >20 | 0 | 0 | 0 |
| Water | % ASTM D6304 >0.01 | ▲ 0.048 | ▲ 0.071 | ▲ 0.014 |
| ppm Water | ppm ASTM D6304 >100 | ▲ 482.4 | ▲ 913.5 | ▲ 146.5 |

FLUID CLEANLINESS

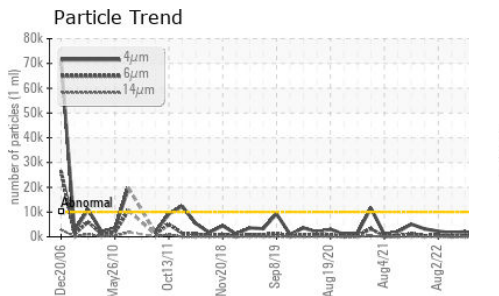
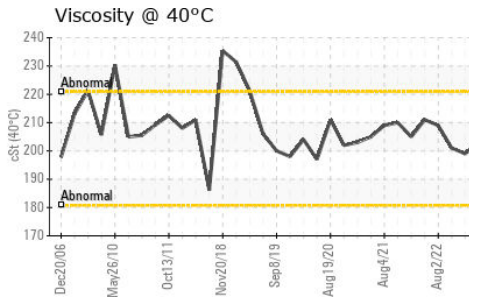
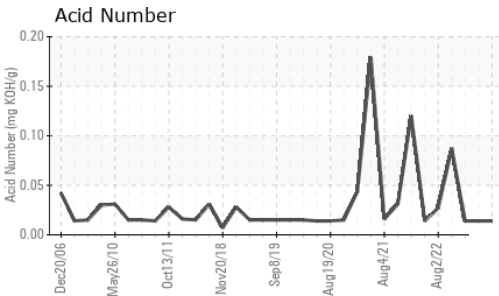
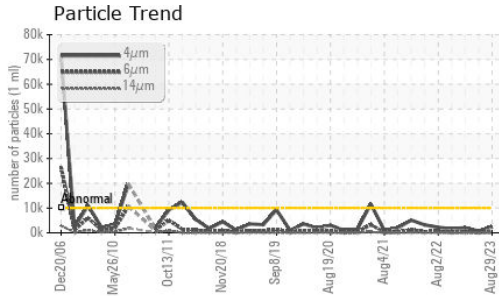
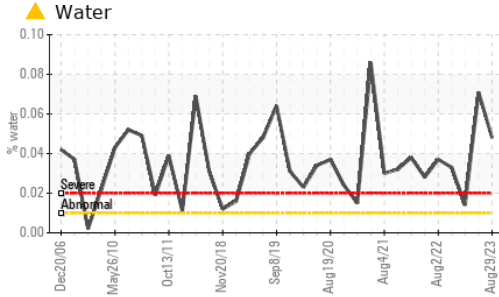
| method | limit/base | current | history1 | history2 |
|-----------------|------------------------|-----------------|----------|----------|
| Particles >4µm | ASTM D7647 >10000 | 2410 | 738 | 2060 |
| Particles >6µm | ASTM D7647 >2500 | 442 | 147 | 437 |
| Particles >14µm | ASTM D7647 >320 | 49 | 12 | 17 |
| Particles >21µm | ASTM D7647 >80 | 18 | 2 | 3 |
| Particles >38µm | ASTM D7647 >20 | 1 | 0 | 0 |
| Particles >71µm | ASTM D7647 >4 | 0 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) >20/18/15 | 18/16/13 | 17/14/11 | 18/16/11 |

FLUID DEGRADATION

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



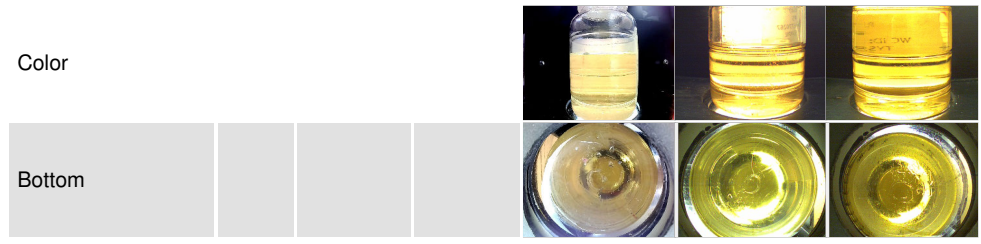
OIL ANALYSIS REPORT



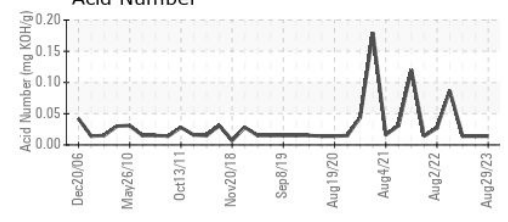
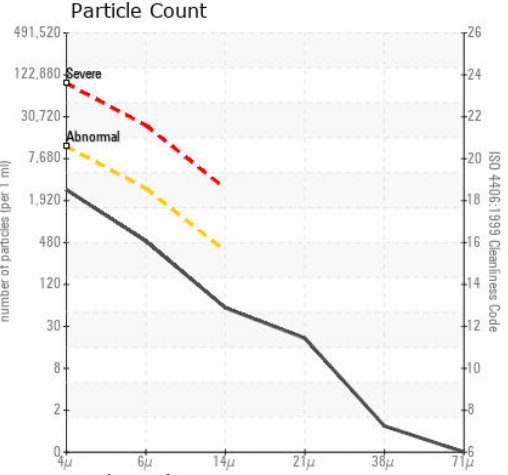
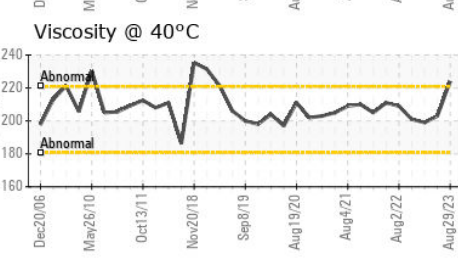
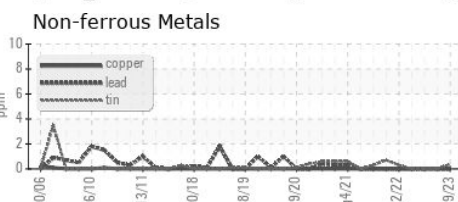
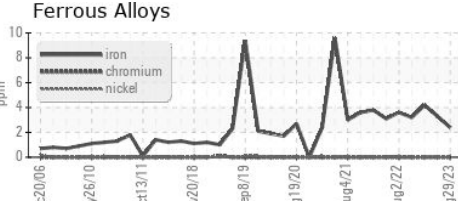
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | 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 | >0.01 | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 224 | 203 | 199 |

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM29433 **Received** : 30 Aug 2023
Lab Number : 05938933 **Diagnosed** : 01 Sep 2023
Unique Number : 10629545 **Diagnostician** : Doug Bogart
Test Package : IND 2

TYSON PP -SPRINGDALE-USP
 SPRINGDALE, AR
 US 72764
 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)

T:
 F: