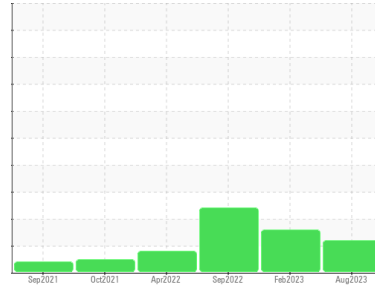




PROBLEM SUMMARY

Sample Rating Trend



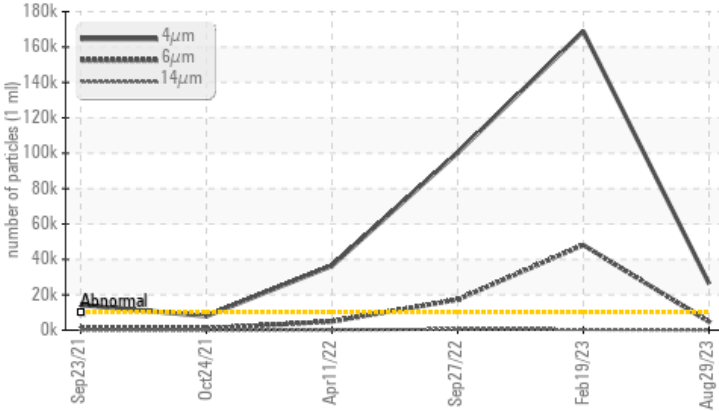
ISO



Machine Id
FES 1 (S/N 19L635V)
 Component
Refrigeration Compressor
 Fluid
USPI 1009-68 SC (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

| Sample Status | | | ABNORMAL | ABNORMAL | ABNORMAL |
|-----------------|--------------|-----------|------------|------------|------------|
| Particles >4µm | ASTM D7647 | >10000 | ▲ 26255 | ▲ 168913 | ▲ 100305 |
| Particles >6µm | ASTM D7647 | >2500 | ▲ 4750 | ▲ 48085 | ▲ 17232 |
| Oil Cleanliness | ISO 4406 (c) | >20/18/15 | ▲ 22/19/14 | ▲ 25/23/16 | ▲ 24/21/16 |

Customer Id: TYSPHIHUN
 Sample No.: USP0000361
 Lab Number: 05938953
 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

19 Feb 2023 Diag: Doug Bogart

ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



27 Sep 2022 Diag: Doug Bogart

VISCOSITY



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. An increase in the viscosity is noted. Confirmed. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report



11 Apr 2022 Diag: Doug Bogart

ISO



Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

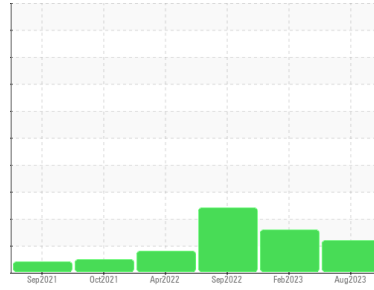
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
FES 1 (S/N 19L635V)

Component
Refrigeration Compressor
Fluid
USPI 1009-68 SC (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

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 | USP0000361 | USP246819 | USP242594 |
| Sample Date | Client Info | 29 Aug 2023 | 19 Feb 2023 | 27 Sep 2022 |
| 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 | | ABNORMAL | ABNORMAL | ABNORMAL |

WEAR METALS

| method | limit/base | current | history1 | history2 | |
|----------|------------|----------------|--------------|----------|----|
| Iron | ppm | ASTM D5185m >8 | <1 | 3 | <1 |
| 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 | 0 | 0 |
| Lead | ppm | ASTM D5185m >2 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m >8 | 0 | 0 | <1 |
| Tin | ppm | ASTM D5185m >4 | 0 | 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 | 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 | 2 | <1 |
| Sulfur | ppm | ASTM D5185m 50 | 0 | 23 | 0 |

CONTAMINANTS

| method | limit/base | current | history1 | history2 | |
|-----------|------------|------------------|--------------|----------|-------|
| Silicon | ppm | ASTM D5185m >15 | 0 | <1 | 0 |
| Sodium | ppm | ASTM D5185m | 0 | 0 | <1 |
| Potassium | ppm | ASTM D5185m >20 | 0 | 0 | 0 |
| Water | % | ASTM D6304 >0.01 | 0.002 | 0.00 | 0.005 |
| ppm Water | ppm | ASTM D6304 >100 | 24.6 | 0.00 | 57.0 |

FLUID CLEANLINESS

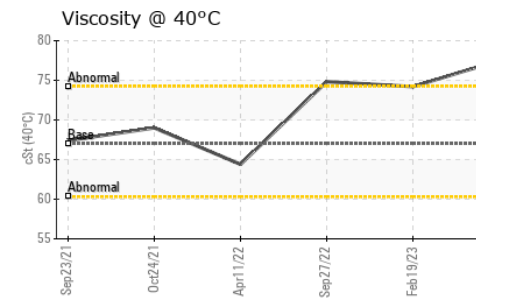
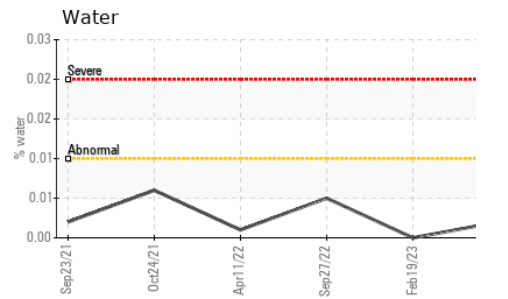
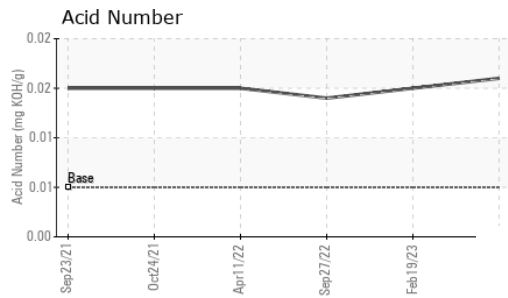
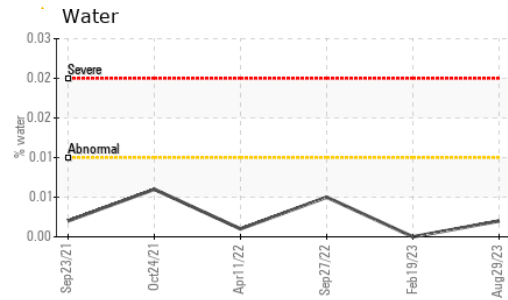
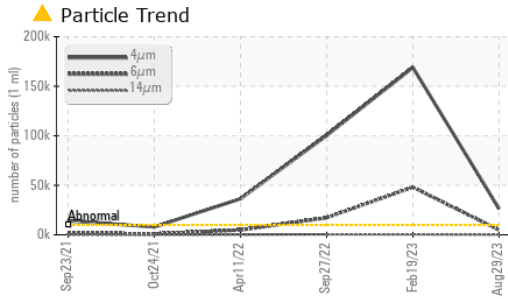
| method | limit/base | current | history1 | history2 |
|-----------------|------------------------|-------------------|------------|------------|
| Particles >4µm | ASTM D7647 >10000 | ▲ 26255 | ▲ 168913 | ▲ 100305 |
| Particles >6µm | ASTM D7647 >2500 | ▲ 4750 | ▲ 48085 | ▲ 17232 |
| Particles >14µm | ASTM D7647 >320 | 105 | ▲ 405 | ▲ 512 |
| Particles >21µm | ASTM D7647 >80 | 20 | 17 | ▲ 93 |
| Particles >38µm | ASTM D7647 >20 | 0 | 0 | 1 |
| Particles >71µm | ASTM D7647 >4 | 0 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) >20/18/15 | ▲ 22/19/14 | ▲ 25/23/16 | ▲ 24/21/16 |

FLUID DEGRADATION

| method | limit/base | current | history1 | history2 | |
|------------------|------------|-----------------|--------------|----------|-------|
| Acid Number (AN) | mg KOH/g | ASTM D974 0.005 | 0.016 | 0.015 | 0.014 |



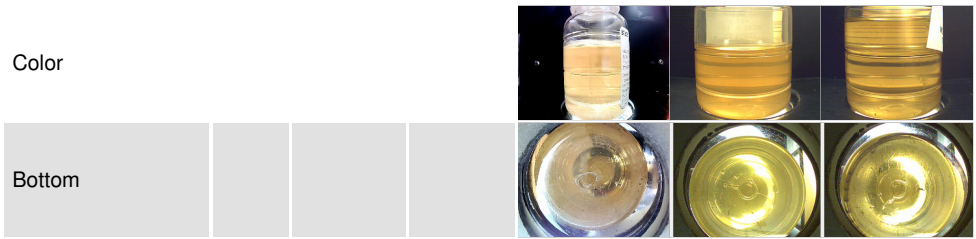
OIL ANALYSIS REPORT



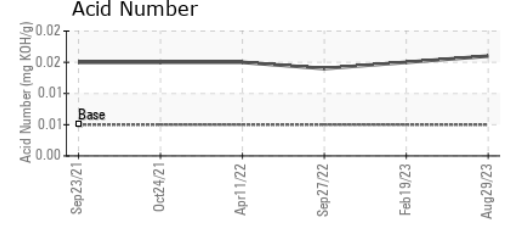
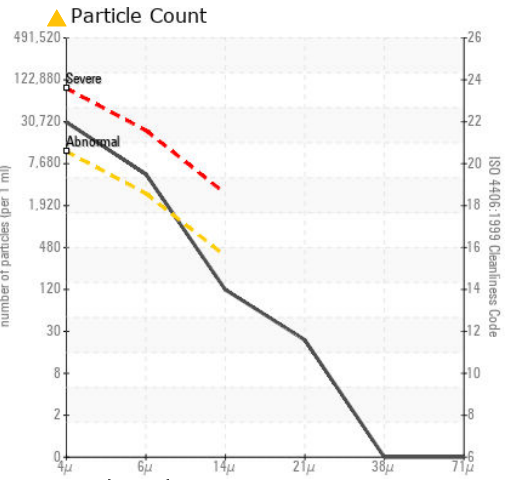
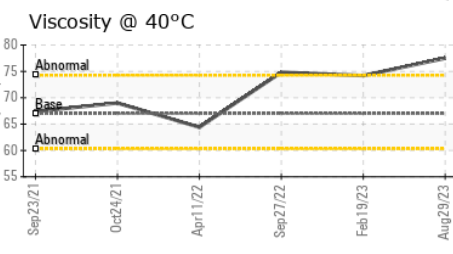
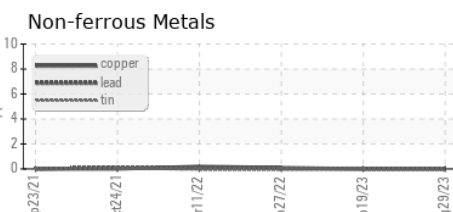
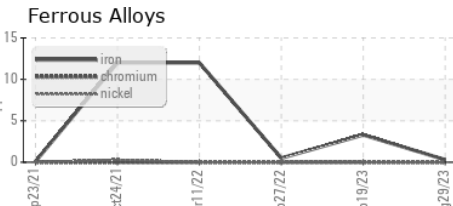
| PARAMETER | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | LIGHT | LIGHT |
| 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 |

| PARAMETER | method | limit/base | current | history1 | history2 |
|------------------|--------|--------------|---------|----------|----------|
| FLUID PROPERTIES | | | | | |
| Visc @ 40°C | cSt | ASTM D445 67 | 77.5 | 74.2 | ▲ 74.83 |

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0000361
Lab Number : 05938953
Unique Number : 10629565
Test Package : IND 2

TYSON PHILLY CHEESESTEAK - HUNTING PARK
 520 E HUNTING PARK AVE
 PHILADELPHIA, PA
 US 19124
 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: