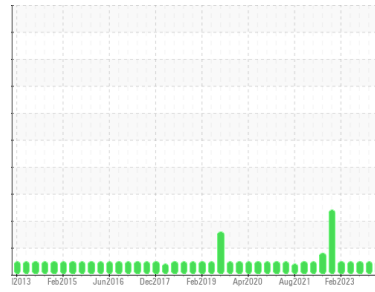




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**FRICK TYSSSED RS 5**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**USPI ALT-68 SC (--- 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 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 | <b>USP0012900</b>  | USP0004691  | USP0001742  |
| Sample Date   | Client Info | <b>25 May 2024</b> | 21 Dec 2023 | 28 Sep 2023 |
| Machine Age   | hrs         | Client Info        | <b>0</b>    | 0           |
| Oil Age       | hrs         | Client Info        | <b>0</b>    | 0           |
| Oil Changed   | Client Info | <b>N/A</b>         | N/A         | N/A         |
| Sample Status |             | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## WEAR METALS

| method   | limit/base | current     | history1 | history2 |   |
|----------|------------|-------------|----------|----------|---|
| Iron     | ppm        | ASTM D5185m | >8       | <b>0</b> | 0 |
| Chromium | ppm        | ASTM D5185m | >2       | <b>0</b> | 0 |
| Nickel   | ppm        | ASTM D5185m |          | <b>0</b> | 0 |
| Titanium | ppm        | ASTM D5185m |          | <b>0</b> | 0 |
| Silver   | ppm        | ASTM D5185m | >2       | <b>0</b> | 0 |
| Aluminum | ppm        | ASTM D5185m | >3       | <b>0</b> | 0 |
| Lead     | ppm        | ASTM D5185m | >2       | <b>0</b> | 0 |
| Copper   | ppm        | ASTM D5185m | >8       | <b>0</b> | 0 |
| Tin      | ppm        | ASTM D5185m | >4       | <b>0</b> | 0 |
| Vanadium | ppm        | ASTM D5185m |          | <b>0</b> | 0 |
| Cadmium  | ppm        | ASTM D5185m |          | <b>0</b> | 0 |

## ADDITIVES

| method     | limit/base | current     | history1 | history2 |   |
|------------|------------|-------------|----------|----------|---|
| Boron      | ppm        | ASTM D5185m |          | <b>0</b> | 0 |
| Barium     | ppm        | ASTM D5185m |          | <b>0</b> | 0 |
| Molybdenum | ppm        | ASTM D5185m |          | <b>0</b> | 0 |
| Manganese  | ppm        | ASTM D5185m |          | <b>0</b> | 0 |
| Magnesium  | ppm        | ASTM D5185m |          | <b>0</b> | 0 |
| Calcium    | ppm        | ASTM D5185m |          | <b>0</b> | 0 |
| Phosphorus | ppm        | ASTM D5185m |          | <b>0</b> | 0 |
| Zinc       | ppm        | ASTM D5185m |          | <b>0</b> | 0 |
| Sulfur     | ppm        | ASTM D5185m | 50       | <b>0</b> | 0 |

## CONTAMINANTS

| method    | limit/base | current     | history1 | history2     |       |
|-----------|------------|-------------|----------|--------------|-------|
| Silicon   | ppm        | ASTM D5185m | >15      | <b>0</b>     | 0     |
| Sodium    | ppm        | ASTM D5185m |          | <b>&lt;1</b> | 0     |
| Potassium | ppm        | ASTM D5185m | >20      | <b>0</b>     | 0     |
| Water     | %          | ASTM D6304  | >0.01    | <b>0.003</b> | 0.003 |
| ppm Water | ppm        | ASTM D6304  | >100     | <b>33</b>    | 39    |

## FLUID CLEANLINESS

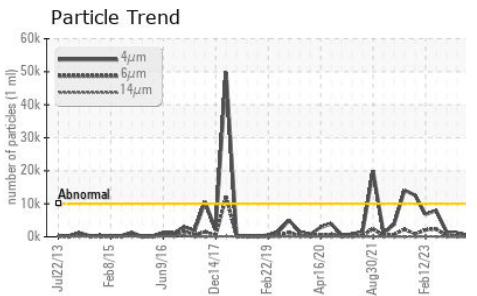
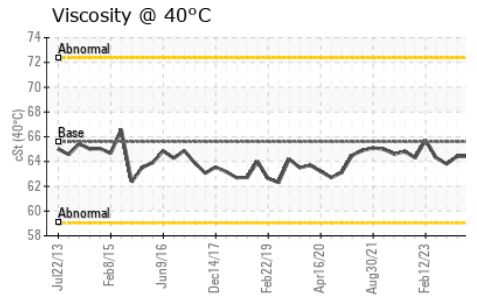
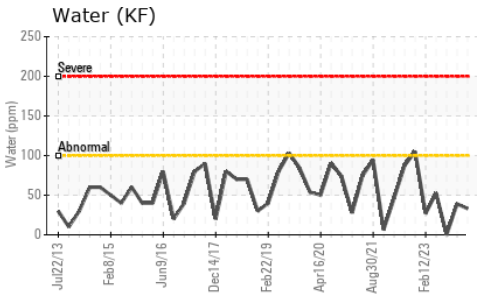
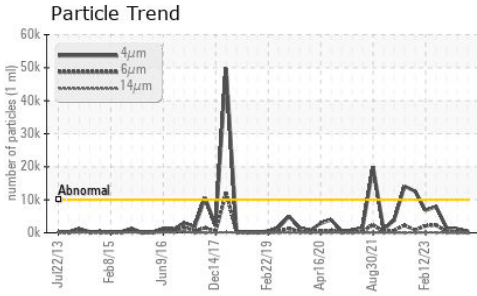
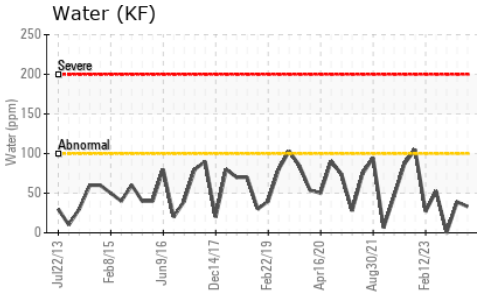
| method          | limit/base   | current   | history1        | history2 |          |
|-----------------|--------------|-----------|-----------------|----------|----------|
| Particles >4µm  | ASTM D7647   | >10000    | <b>491</b>      | 1137     | 1494     |
| Particles >6µm  | ASTM D7647   | >2500     | <b>151</b>      | 285      | 300      |
| Particles >14µm | ASTM D7647   | >320      | <b>18</b>       | 20       | 14       |
| Particles >21µm | ASTM D7647   | >80       | <b>5</b>        | 5        | 4        |
| Particles >38µm | ASTM D7647   | >20       | <b>0</b>        | 0        | 2        |
| Particles >71µm | ASTM D7647   | >4        | <b>0</b>        | 0        | 0        |
| Oil Cleanliness | ISO 4406 (c) | >20/18/15 | <b>16/14/11</b> | 17/15/11 | 18/15/11 |

## FLUID DEGRADATION

| method           | limit/base | current   | history1 | history2     |       |
|------------------|------------|-----------|----------|--------------|-------|
| Acid Number (AN) | mg KOH/g   | ASTM D974 | 0.005    | <b>0.013</b> | 0.014 |



# OIL ANALYSIS REPORT



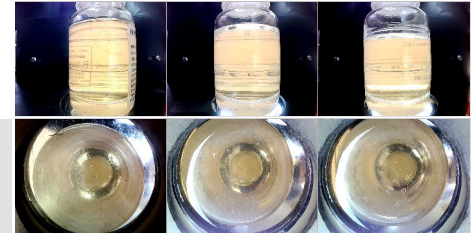
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| 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  | 65.6    | 64.4     | 63.8     |

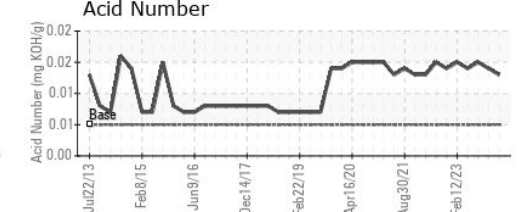
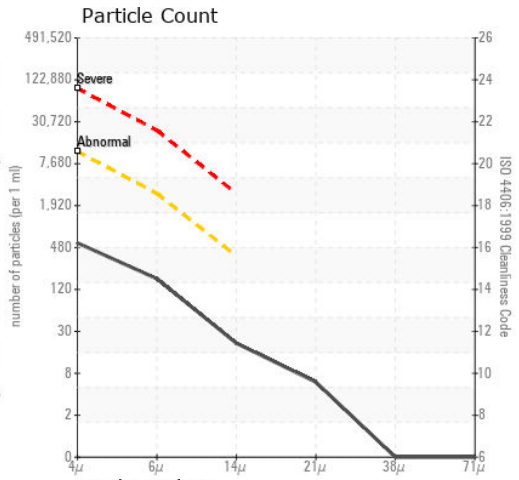
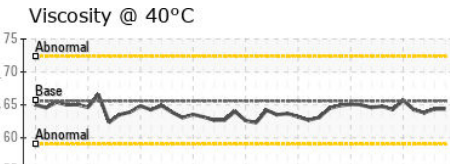
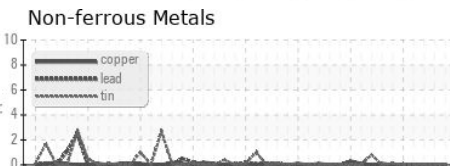
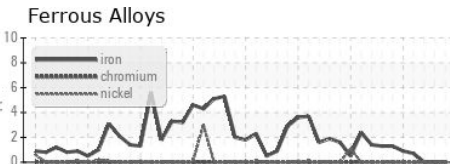
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|

Color

Bottom



## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : USP0012900  
 Lab Number : 06197719  
 Unique Number : 11059842  
 Test Package : IND 2

Received : 03 Jun 2024  
 Tested : 04 Jun 2024  
 Diagnosed : 05 Jun 2024 - Doug Bogart

**TYSON - SEDALIA - USP**  
 19578 WHITFIELD RD  
 SEDALIA, MO  
 US 65301

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)

Contact: BONNIE  
 bonnie.weathers@tyson.com

T:  
 F: