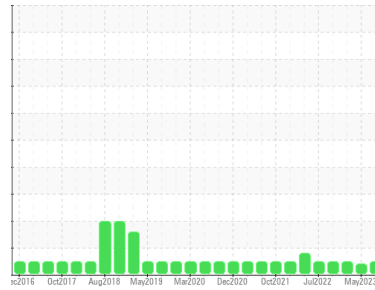




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**GEA 3 PRESSOR**

Component  
**Gearbox**  
Fluid  
**USPI GEAR 680 (--- 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 | <b>USPM29308</b>   | USPM28231   | USPM26389   |
| Sample Date   | Client Info | <b>19 Aug 2023</b> | 13 May 2023 | 05 Feb 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>      | ABNORMAL    | NORMAL      |

## WEAR METALS

| method   | limit/base | current          | history1     | history2 |    |
|----------|------------|------------------|--------------|----------|----|
| Iron     | ppm        | ASTM D5185m >200 | <b>3</b>     | <1       | 6  |
| Chromium | ppm        | ASTM D5185m >15  | <b>0</b>     | <1       | 0  |
| Nickel   | ppm        | ASTM D5185m >15  | <b>0</b>     | <1       | 0  |
| Titanium | ppm        | ASTM D5185m      | <b>0</b>     | 0        | 0  |
| Silver   | ppm        | ASTM D5185m      | <b>0</b>     | 0        | 0  |
| Aluminum | ppm        | ASTM D5185m >25  | <b>&lt;1</b> | <1       | <1 |
| Lead     | ppm        | ASTM D5185m >100 | <b>0</b>     | 0        | 0  |
| Copper   | ppm        | ASTM D5185m >200 | <b>&lt;1</b> | <1       | <1 |
| Tin      | ppm        | ASTM D5185m >25  | <b>0</b>     | 0        | <1 |
| Vanadium | ppm        | ASTM D5185m      | <b>&lt;1</b> | 0        | 0  |
| Cadmium  | ppm        | ASTM D5185m      | <b>0</b>     | 0        | 0  |

## ADDITIVES

| method     | limit/base | current     | history1     | history2 |      |
|------------|------------|-------------|--------------|----------|------|
| Boron      | ppm        | ASTM D5185m | <b>0</b>     | 0        | 0    |
| Barium     | ppm        | ASTM D5185m | <b>0</b>     | 0        | 0    |
| Molybdenum | ppm        | ASTM D5185m | <b>0</b>     | 0        | 0    |
| Manganese  | ppm        | ASTM D5185m | <b>&lt;1</b> | <1       | <1   |
| Magnesium  | ppm        | ASTM D5185m | <b>0</b>     | <1       | 2    |
| Calcium    | ppm        | ASTM D5185m | <b>4</b>     | 3        | 4    |
| Phosphorus | ppm        | ASTM D5185m | <b>209</b>   | 215      | 171  |
| Zinc       | ppm        | ASTM D5185m | <b>0</b>     | 0        | 1    |
| Sulfur     | ppm        | ASTM D5185m | <b>7390</b>  | 7908     | 6084 |

## CONTAMINANTS

| method    | limit/base | current          | history1     | history2 |       |
|-----------|------------|------------------|--------------|----------|-------|
| Silicon   | ppm        | ASTM D5185m >50  | <b>&lt;1</b> | 0        | <1    |
| Sodium    | ppm        | ASTM D5185m      | <b>0</b>     | <1       | 0     |
| Potassium | ppm        | ASTM D5185m >20  | <b>1</b>     | 2        | 0     |
| Water     | %          | ASTM D6304 >0.2  | <b>0.001</b> | 0.002    | 0.003 |
| ppm Water | ppm        | ASTM D6304 >2000 | <b>14.7</b>  | 19.0     | 28.1  |

## FLUID CLEANLINESS

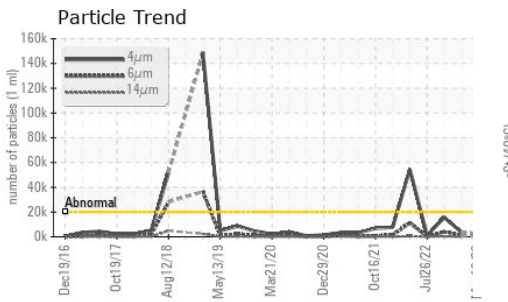
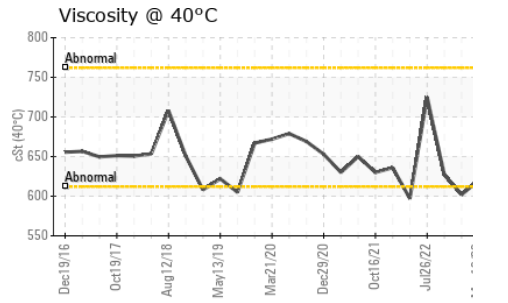
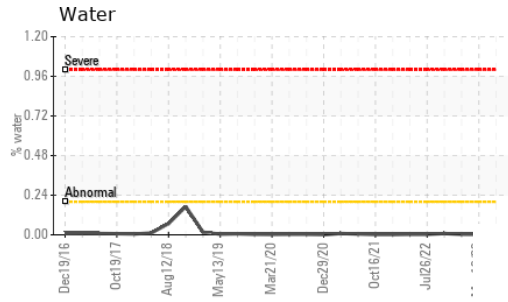
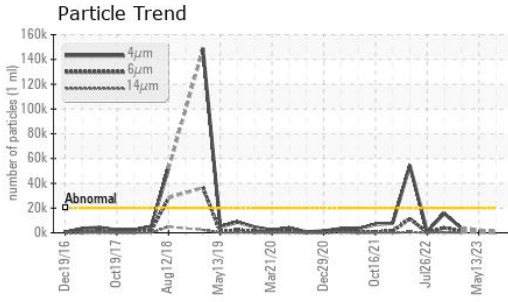
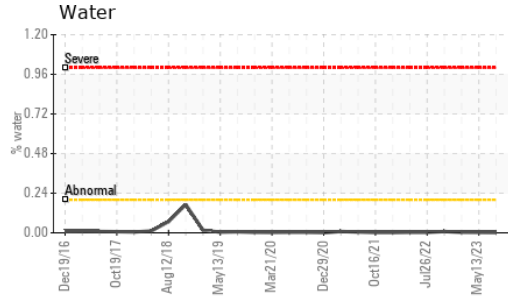
| method          | limit/base             | current         | history1 | history2 |
|-----------------|------------------------|-----------------|----------|----------|
| Particles >4µm  | ASTM D7647 >20000      | <b>919</b>      | ---      | 3550     |
| Particles >6µm  | ASTM D7647 >5000       | <b>278</b>      | ---      | 1158     |
| Particles >14µm | ASTM D7647 >640        | <b>29</b>       | ---      | 108      |
| Particles >21µm | ASTM D7647 >160        | <b>8</b>        | ---      | 26       |
| Particles >38µm | ASTM D7647 >40         | <b>0</b>        | ---      | 2        |
| Particles >71µm | ASTM D7647 >10         | <b>0</b>        | ---      | 0        |
| Oil Cleanliness | ISO 4406 (c) >21/19/16 | <b>17/15/12</b> | ---      | 19/17/14 |

## FLUID DEGRADATION

| method           | limit/base | current    | history1    | history2 |      |
|------------------|------------|------------|-------------|----------|------|
| Acid Number (AN) | mg KOH/g   | ASTM D8045 | <b>0.50</b> | 0.41     | 0.45 |



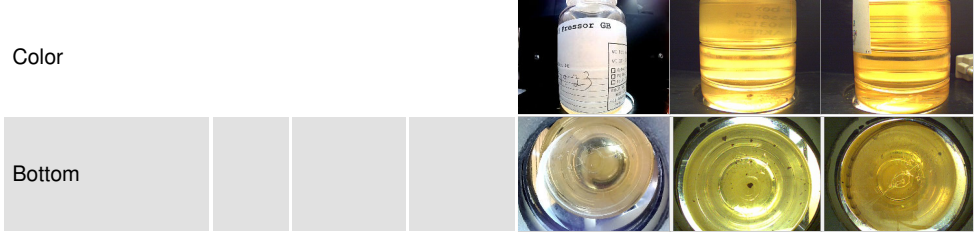
# OIL ANALYSIS REPORT



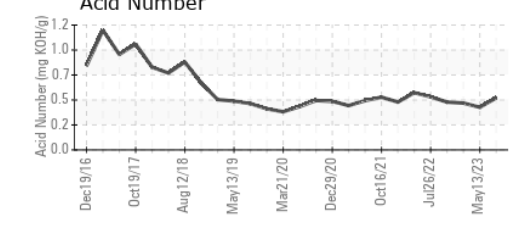
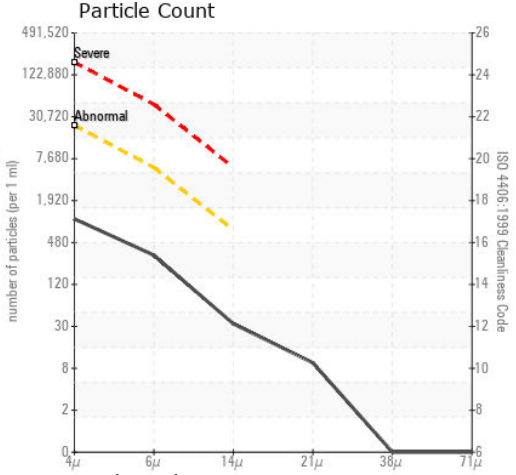
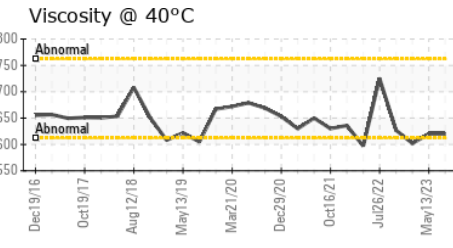
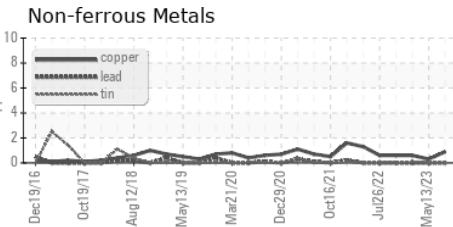
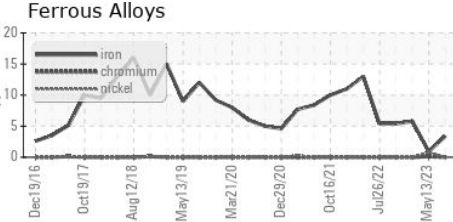
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| 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    | >0.2    | NEG      | NEG      |
| Free Water       | scalar | *Visual    |         | NEG      | NEG      |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 620     | 620      | 602      |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USPM29308 **Received** : 23 Aug 2023  
**Lab Number** : 05932810 **Diagnosed** : 24 Aug 2023  
**Unique Number** : 10618081 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**TYSON**  
 US  
 Contact:

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: