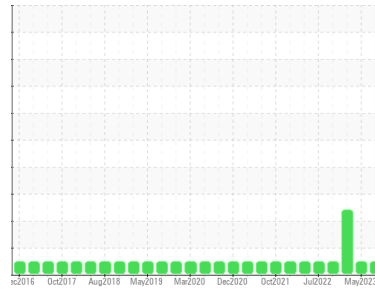




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**GEA S ATLAS DRYER**

Component  
**Gearbox**

Fluid  
**USPI 3206-EP (--- 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>USPM29339</b>   | USPM28235   | USPM26393   |
| Sample Date   | Client Info | <b>19 Aug 2023</b> | 16 May 2023 | 04 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>      | NORMAL      | ABNORMAL    |

## WEAR METALS

| method   | limit/base | current     | history1 | history2     |    |    |
|----------|------------|-------------|----------|--------------|----|----|
| Iron     | ppm        | ASTM D5185m | >200     | <b>4</b>     | 3  | 5  |
| Chromium | ppm        | ASTM D5185m | >15      | <b>0</b>     | 0  | 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> | 0  | <1 |
| Tin      | ppm        | ASTM D5185m | >25      | <b>0</b>     | 0  | 0  |
| 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>&lt;1</b> | <1  | 2   |
| Calcium    | ppm        | ASTM D5185m |          | <b>0</b>     | <1  | 0   |
| Phosphorus | ppm        | ASTM D5185m |          | <b>524</b>   | 578 | 473 |
| Zinc       | ppm        | ASTM D5185m |          | <b>2</b>     | 0   | 5   |
| Sulfur     | ppm        | ASTM D5185m |          | <b>1060</b>  | 630 | 824 |

## CONTAMINANTS

| method    | limit/base | current     | history1 | history2     |       |       |
|-----------|------------|-------------|----------|--------------|-------|-------|
| Silicon   | ppm        | ASTM D5185m | >50      | <b>8</b>     | 5     | 8     |
| Sodium    | ppm        | ASTM D5185m |          | <b>0</b>     | <1    | 0     |
| Potassium | ppm        | ASTM D5185m | >20      | <b>&lt;1</b> | 2     | 0     |
| Water     | %          | ASTM D6304  | >0.2     | <b>0.00</b>  | 0.001 | 0.003 |
| ppm Water | ppm        | ASTM D6304  | >2000    | <b>0.00</b>  | 7.7   | 29.4  |

## FLUID CLEANLINESS

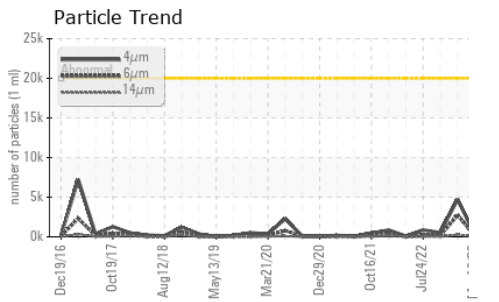
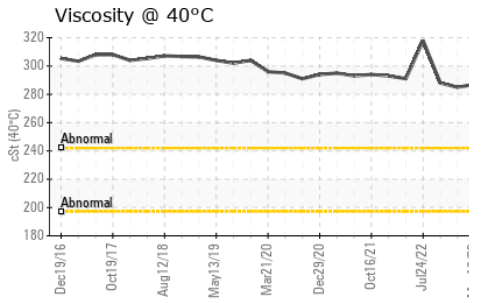
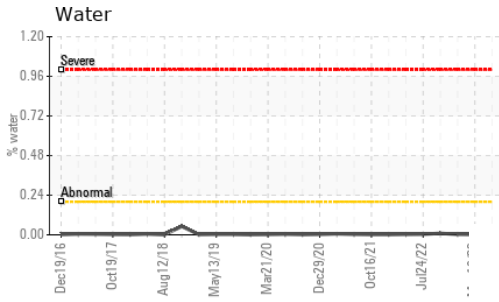
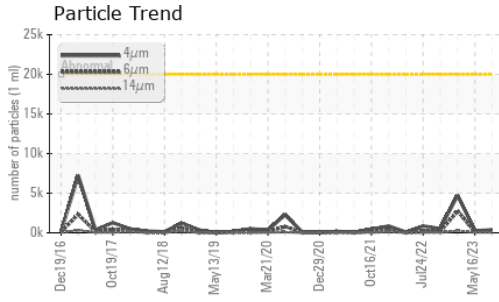
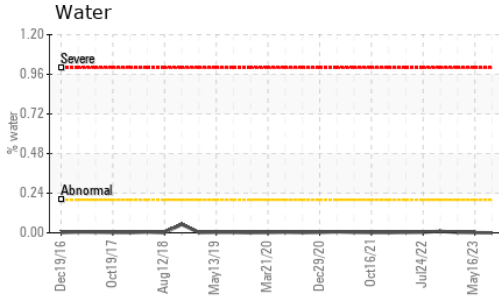
| method          | limit/base   | current   | history1        | history2 |          |
|-----------------|--------------|-----------|-----------------|----------|----------|
| Particles >4µm  | ASTM D7647   | >20000    | <b>377</b>      | 258      | 4714     |
| Particles >6µm  | ASTM D7647   | >5000     | <b>167</b>      | 140      | 2751     |
| Particles >14µm | ASTM D7647   | >640      | <b>27</b>       | 32       | 268      |
| Particles >21µm | ASTM D7647   | >160      | <b>7</b>        | 15       | 33       |
| Particles >38µm | ASTM D7647   | >40       | <b>1</b>        | 1        | 3        |
| Particles >71µm | ASTM D7647   | >10       | <b>0</b>        | 0        | 0        |
| Oil Cleanliness | ISO 4406 (c) | >21/19/16 | <b>16/15/12</b> | 15/14/12 | 19/19/15 |

## FLUID DEGRADATION

| method           | limit/base | current    | history1 | history2    |      |      |
|------------------|------------|------------|----------|-------------|------|------|
| Acid Number (AN) | mg KOH/g   | ASTM D8045 |          | <b>0.57</b> | 0.55 | 0.55 |



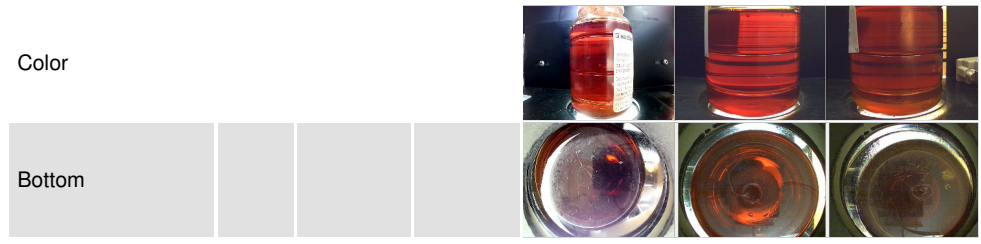
# OIL ANALYSIS REPORT



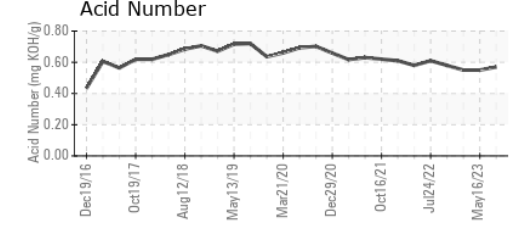
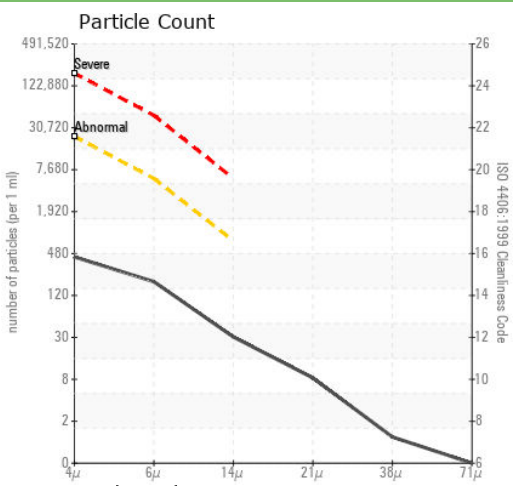
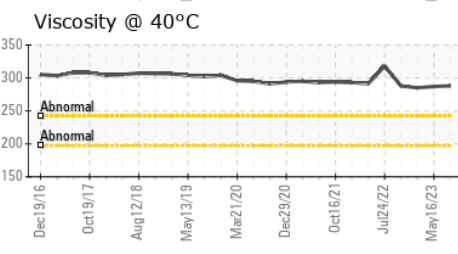
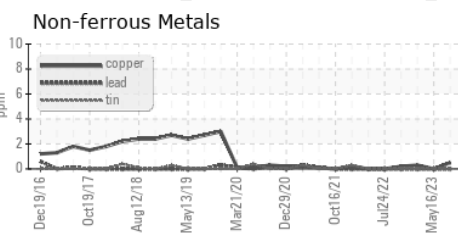
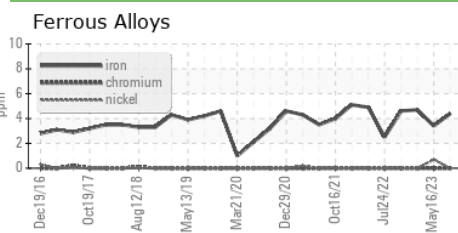
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| 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    | ▲ SOLID  |
| Odor             | scalar | *Visual    | NORML   | NORML    | NORML    |
| Emulsified Water | scalar | *Visual    | >0.2    | NEG      | NEG      |
| Free Water       | scalar | *Visual    |         | NEG      | ▲ 10.0   |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 288     | 287      | 285      |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USPM29339 **Received** : 23 Aug 2023  
**Lab Number** : 05932805 **Diagnosed** : 24 Aug 2023  
**Unique Number** : 10618076 **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: