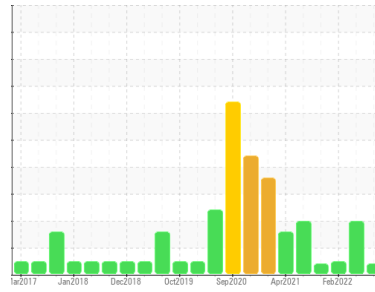




# OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS



Machine Id  
**AIR 6 GD (S/N 3211411)**  
 Component  
**Air Compressor**  
 Fluid  
**USPI AIR 46 (--- GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

### Wear

All component wear rates are normal.

### Contamination

Moderate concentration of visible dirt/debris 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 | <b>USPM37689</b>   | USPM30086   | USPM22515   |
| Sample Date   | Client Info | <b>13 Jun 2024</b> | 21 Feb 2024 | 07 Feb 2022 |
| Machine Age   | hrs         | Client Info        | 0           | 0           |
| Oil Age       | hrs         | Client Info        | 0           | 0           |
| Oil Changed   | Client Info | <b>N/A</b>         | N/A         | N/A         |
| Sample Status |             | <b>ABNORMAL</b>    | ABNORMAL    | NORMAL      |

## WEAR METALS

| method   | limit/base | current         | history1     | history2 |    |
|----------|------------|-----------------|--------------|----------|----|
| Iron     | ppm        | ASTM D5185m >50 | <b>1</b>     | 0        | 0  |
| Chromium | ppm        | ASTM D5185m >4  | <b>0</b>     | <1       | 0  |
| Nickel   | ppm        | ASTM D5185m >4  | <b>0</b>     | 0        | 0  |
| Titanium | ppm        | ASTM D5185m     | <b>0</b>     | 0        | 0  |
| Silver   | ppm        | ASTM D5185m     | <b>0</b>     | 0        | 0  |
| Aluminum | ppm        | ASTM D5185m >10 | <b>&lt;1</b> | 0        | <1 |
| Lead     | ppm        | ASTM D5185m >20 | <b>&lt;1</b> | 0        | 0  |
| Copper   | ppm        | ASTM D5185m >40 | <b>3</b>     | 2        | 1  |
| Tin      | ppm        | ASTM D5185m >5  | <b>&lt;1</b> | 0        | <1 |
| Antimony | ppm        | ASTM D5185m     | <b>---</b>   | ---      | 0  |
| Vanadium | ppm        | ASTM D5185m     | <b>0</b>     | 0        | 0  |
| Cadmium  | ppm        | ASTM D5185m     | <b>0</b>     | 0        | 0  |

## ADDITIVES

| method     | limit/base | current       | history1     | history2 |    |
|------------|------------|---------------|--------------|----------|----|
| Boron      | ppm        | ASTM D5185m 0 | <b>&lt;1</b> | 0        | <1 |
| Barium     | ppm        | ASTM D5185m 0 | <b>0</b>     | 0        | 0  |
| Molybdenum | ppm        | ASTM D5185m 0 | <b>&lt;1</b> | 0        | 0  |
| Manganese  | ppm        | ASTM D5185m   | <b>&lt;1</b> | 0        | 0  |
| Magnesium  | ppm        | ASTM D5185m 0 | <b>0</b>     | 0        | 0  |
| Calcium    | ppm        | ASTM D5185m 0 | <b>0</b>     | 0        | 0  |
| Phosphorus | ppm        | ASTM D5185m 1 | <b>2</b>     | 0        | 0  |
| Zinc       | ppm        | ASTM D5185m 0 | <b>0</b>     | 0        | 0  |
| Sulfur     | ppm        | ASTM D5185m 0 | <b>28</b>    | 40       | 23 |

## CONTAMINANTS

| method    | limit/base | current          | history1     | history2 |       |
|-----------|------------|------------------|--------------|----------|-------|
| Silicon   | ppm        | ASTM D5185m >25  | <b>3</b>     | 2        | 2     |
| Sodium    | ppm        | ASTM D5185m      | <b>&lt;1</b> | 0        | 0     |
| Potassium | ppm        | ASTM D5185m >20  | <b>3</b>     | 0        | 0     |
| Water     | %          | ASTM D6304 >0.2  | <b>0.075</b> | 0.034    | 0.025 |
| ppm Water | ppm        | ASTM D6304 >2000 | <b>756</b>   | 342      | 256.8 |

## FLUID CLEANLINESS

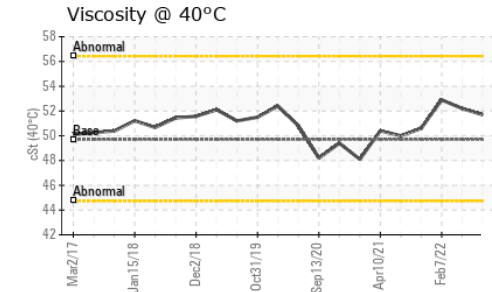
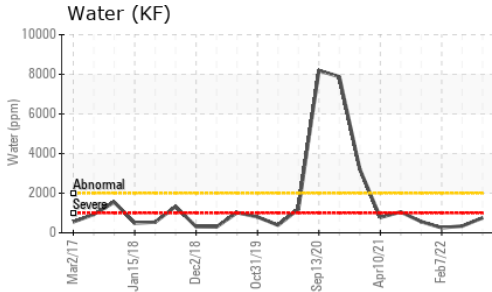
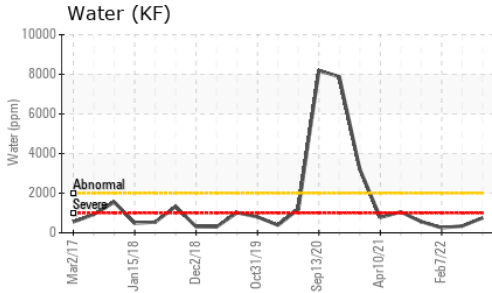
| method          | limit/base             | current    | history1          | history2 |
|-----------------|------------------------|------------|-------------------|----------|
| Particles >4µm  | ASTM D7647 >10000      | <b>---</b> | <b>▲ 65156</b>    | 6450     |
| Particles >6µm  | ASTM D7647 >2500       | <b>---</b> | <b>▲ 17813</b>    | 1295     |
| Particles >14µm | ASTM D7647 >320        | <b>---</b> | <b>▲ 888</b>      | 81       |
| Particles >21µm | ASTM D7647 >80         | <b>---</b> | <b>▲ 197</b>      | 18       |
| Particles >38µm | ASTM D7647 >20         | <b>---</b> | <b>7</b>          | 3        |
| Particles >71µm | ASTM D7647 >4          | <b>---</b> | <b>0</b>          | 0        |
| Oil Cleanliness | ISO 4406 (c) >20/18/15 | <b>---</b> | <b>▲ 23/21/17</b> | 20/17/14 |

## FLUID DEGRADATION

| method           | limit/base | current         | history1    | history2 |       |
|------------------|------------|-----------------|-------------|----------|-------|
| Acid Number (AN) | mg KOH/g   | ASTM D8045 0.05 | <b>0.12</b> | 0.12     | 0.137 |



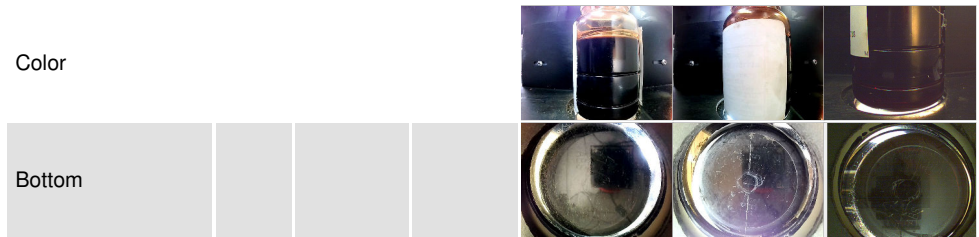
# OIL ANALYSIS REPORT



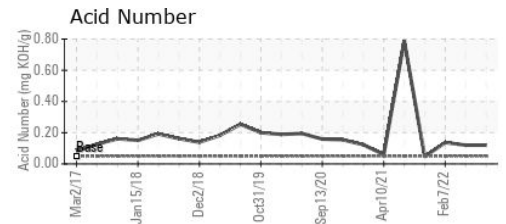
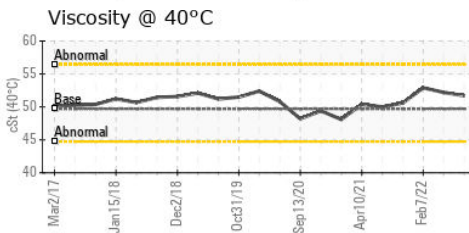
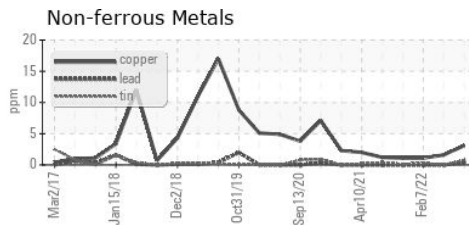
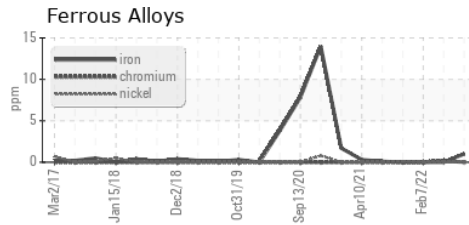
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual    | NONE    | NONE     | NONE     |
| Debris           | scalar | *Visual    | ▲ MODER | 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  | 49.7    | 51.7     | 52.2     |

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



## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USPM37689  
**Lab Number** : 06210168  
**Unique Number** : 11083032  
**Test Package** : IND 2

**Received** : 14 Jun 2024  
**Tested** : 18 Jun 2024  
**Diagnosed** : 18 Jun 2024 - Don Baldrige

**SMITHFIELD - CARROLL - SMICAR**  
 401 N GRANT RD  
 CARROLL, IA  
 US 51401  
 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: