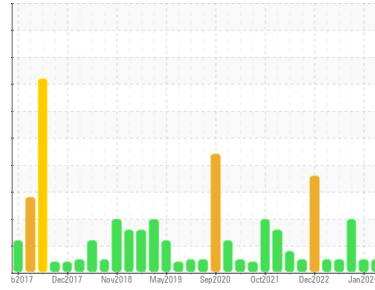




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**SULLAIR SOUTH SULLAIR (S/N 003-122314)**  
 Component  
**Air Compressor**  
 Fluid  
**USPI AIR 46 (--- 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>USPM36119</b>   | USPM30769   | USPM29979   |
| Sample Date   | Client Info | <b>12 May 2024</b> | 27 Jan 2024 | 11 Oct 2023 |
| 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>NORMAL</b>      | NORMAL      | ABNORMAL    |

## WEAR METALS

| method   | limit/base | current         | history1     | history2 |   |
|----------|------------|-----------------|--------------|----------|---|
| Iron     | ppm        | ASTM D5185m >50 | <b>0</b>     | 0        | 0 |
| Chromium | ppm        | ASTM D5185m >4  | <b>0</b>     | 0        | 0 |
| Nickel   | ppm        | ASTM D5185m >4  | <b>&lt;1</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        | 0 |
| Lead     | ppm        | ASTM D5185m >20 | <b>0</b>     | <1       | 0 |
| Copper   | ppm        | ASTM D5185m >40 | <b>3</b>     | 0        | 0 |
| Tin      | ppm        | ASTM D5185m >5  | <b>&lt;1</b> | <1       | 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>0</b>  | 0        | 0 |
| Barium     | ppm        | ASTM D5185m 0 | <b>0</b>  | 0        | 0 |
| Molybdenum | ppm        | ASTM D5185m 0 | <b>0</b>  | 0        | 0 |
| Manganese  | ppm        | ASTM D5185m   | <b>1</b>  | <1       | 0 |
| Magnesium  | ppm        | ASTM D5185m 0 | <b>0</b>  | <1       | 0 |
| Calcium    | ppm        | ASTM D5185m 0 | <b>0</b>  | <1       | 0 |
| Phosphorus | ppm        | ASTM D5185m 1 | <b>1</b>  | 2        | 2 |
| Zinc       | ppm        | ASTM D5185m 0 | <b>0</b>  | 0        | 0 |
| Sulfur     | ppm        | ASTM D5185m 0 | <b>11</b> | 0        | 0 |

## CONTAMINANTS

| method    | limit/base | current          | history1     | history2 |         |
|-----------|------------|------------------|--------------|----------|---------|
| Silicon   | ppm        | ASTM D5185m >25  | <b>&lt;1</b> | 0        | 0       |
| Sodium    | ppm        | ASTM D5185m      | <b>1</b>     | 2        | 0       |
| Potassium | ppm        | ASTM D5185m >20  | <b>0</b>     | <1       | <1      |
| Water     | %          | ASTM D6304 >0.2  | <b>0.125</b> | 0.050    | ▲ 0.249 |
| ppm Water | ppm        | ASTM D6304 >2000 | <b>1257</b>  | 502      | ▲ 2490  |

## FLUID CLEANLINESS

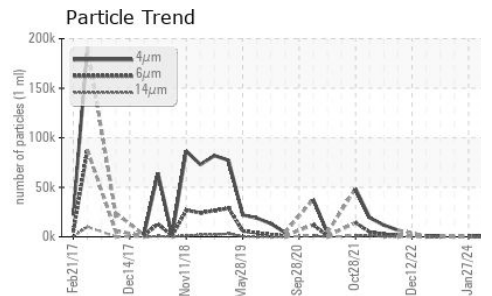
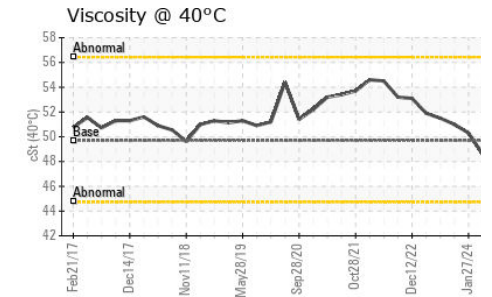
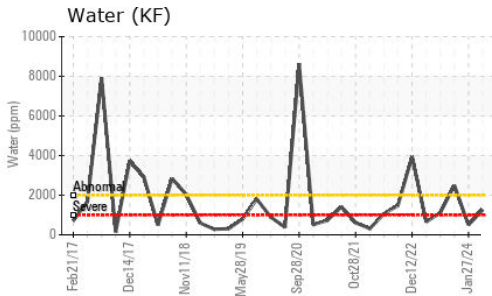
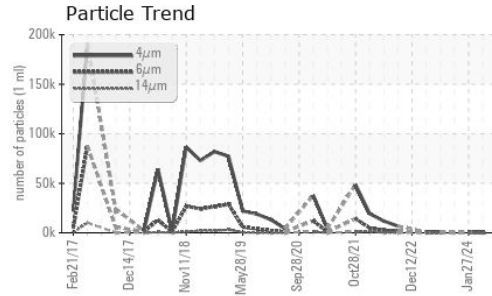
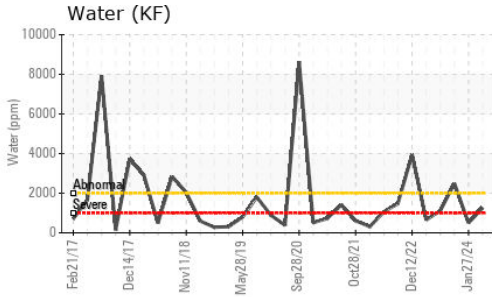
| method          | limit/base             | current         | history1 | history2 |
|-----------------|------------------------|-----------------|----------|----------|
| Particles >4µm  | ASTM D7647             | <b>457</b>      | 1120     | ---      |
| Particles >6µm  | ASTM D7647 >2500       | <b>112</b>      | 299      | ---      |
| Particles >14µm | ASTM D7647 >320        | <b>17</b>       | 18       | ---      |
| Particles >21µm | ASTM D7647 >80         | <b>6</b>        | 7        | ---      |
| Particles >38µm | ASTM D7647 >20         | <b>0</b>        | 0        | ---      |
| Particles >71µm | ASTM D7647 >4          | <b>0</b>        | 0        | ---      |
| Oil Cleanliness | ISO 4406 (c) >--/18/15 | <b>16/14/11</b> | 17/15/11 | ---      |

## FLUID DEGRADATION

| method           | limit/base | current         | history1     | history2 |      |
|------------------|------------|-----------------|--------------|----------|------|
| Acid Number (AN) | mg KOH/g   | ASTM D8045 0.05 | <b>0.092</b> | 0.15     | 0.07 |



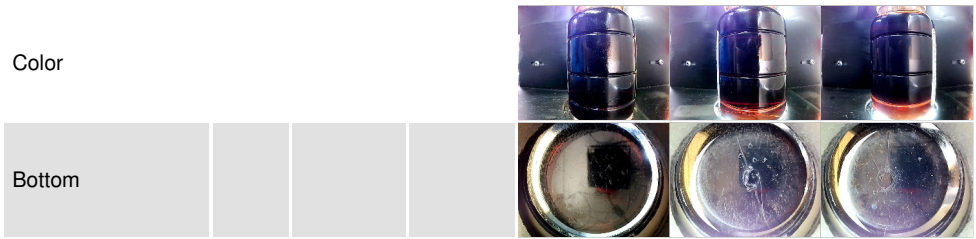
# OIL ANALYSIS REPORT



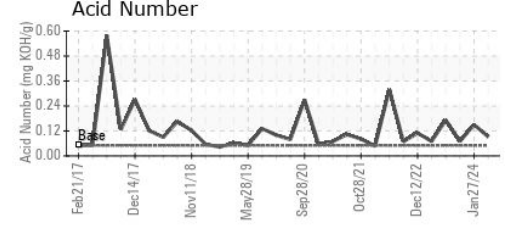
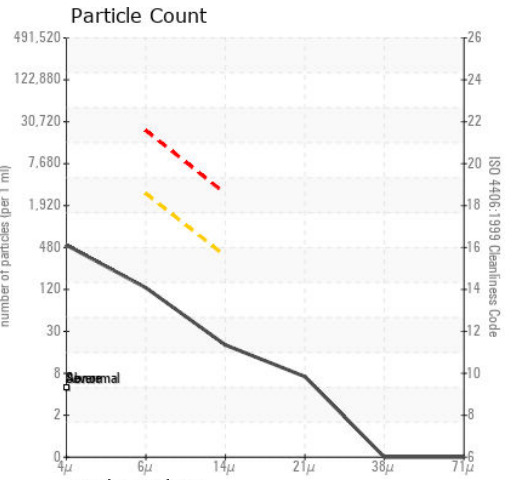
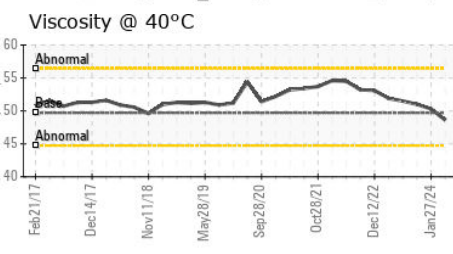
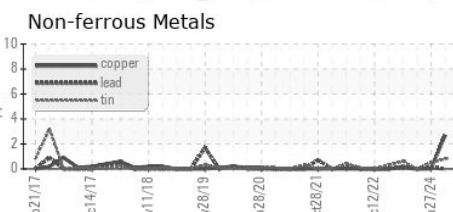
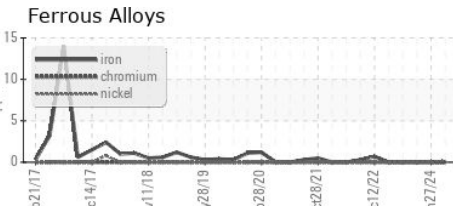
| VISUAL           | method | limit/base | current | history1     | history2 |
|------------------|--------|------------|---------|--------------|----------|
| White Metal      | scalar | *Visual    | NONE    | <b>NONE</b>  | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | <b>NONE</b>  | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | <b>NONE</b>  | NONE     |
| Silt             | scalar | *Visual    | NONE    | <b>NONE</b>  | NONE     |
| Debris           | scalar | *Visual    | NONE    | <b>NONE</b>  | ▲ MODER  |
| Sand/Dirt        | scalar | *Visual    | NONE    | <b>NONE</b>  | NONE     |
| Appearance       | scalar | *Visual    | NORML   | <b>NORML</b> | NORML    |
| Odor             | scalar | *Visual    | NORML   | <b>NORML</b> | NORML    |
| Emulsified Water | scalar | *Visual    | >0.2    | <b>NEG</b>   | NEG      |
| Free Water       | scalar | *Visual    |         | <b>NEG</b>   | NEG      |

| FLUID PROPERTIES | method | limit/base | current | history1    | history2 |
|------------------|--------|------------|---------|-------------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 49.7    | <b>48.6</b> | 50.3     |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USPM36119  
**Lab Number** : 06177182  
**Unique Number** : 11023235  
**Test Package** : IND 2  
**Received** : 13 May 2024  
**Tested** : 14 May 2024  
**Diagnosed** : 14 May 2024 - Doug Bogart

**TYSON-LOGANSPOUR-USP**  
 LOGANSPOUR, IN  
 US  
 Contact: RICK DUVAL

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)

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