

Machine Id  
**QUINCY TAIL WATER DEPRESSION 2 (S/N 73822)**  
 Component  
**Air Compressor**  
 Fluid  
**QUINCY QUINSYN F (19 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>ST39289</b>     | ST35061     | ST34602     |
| Sample Date   | Client Info |             | <b>16 Jan 2024</b> | 24 Aug 2021 | 05 Sep 2018 |
| Machine Age   | hrs         | Client Info | <b>13203</b>       | 11787       | 10449       |
| Oil Age       | hrs         | Client Info | <b>1706</b>        | 0           | 600         |
| 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 | >50 | <b>2</b>     | 5  | 4 |
| Chromium | ppm | ASTM D5185m | >4  | <b>&lt;1</b> | 0  | 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>     | <1 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | <b>2</b>     | 4  | 0 |
| Lead     | ppm | ASTM D5185m | >20 | <b>0</b>     | 0  | 0 |
| Copper   | ppm | ASTM D5185m | >40 | <b>0</b>     | <1 | 0 |
| Tin      | ppm | ASTM D5185m | >5  | <b>0</b>     | 0  | 0 |
| Antimony | ppm | ASTM D5185m |     | <b>---</b>   | 0  | 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 |  | <b>0</b>   | 1   | 0   |
| Barium     | ppm | ASTM D5185m |  | <b>3</b>   | 0   | 0   |
| Molybdenum | ppm | ASTM D5185m |  | <b>0</b>   | 0   | 0   |
| Manganese  | ppm | ASTM D5185m |  | <b>0</b>   | <1  | <1  |
| Magnesium  | ppm | ASTM D5185m |  | <b>0</b>   | 0   | <1  |
| Calcium    | ppm | ASTM D5185m |  | <b>0</b>   | <1  | 4   |
| Phosphorus | ppm | ASTM D5185m |  | <b>505</b> | 455 | 246 |
| Zinc       | ppm | ASTM D5185m |  | <b>0</b>   | 0   | 13  |
| Sulfur     | ppm | ASTM D5185m |  | <b>575</b> | 481 | 100 |

**CONTAMINANTS**    method    limit/base    current    history1    history2

|           |     |             |       |              |       |       |
|-----------|-----|-------------|-------|--------------|-------|-------|
| Silicon   | ppm | ASTM D5185m | >25   | <b>0</b>     | 0     | <1    |
| Sodium    | ppm | ASTM D5185m |       | <b>0</b>     | 0     | <1    |
| Potassium | ppm | ASTM D5185m | >20   | <b>&lt;1</b> | 0     | <1    |
| Water     | %   | ASTM D6304  | >0.6  | <b>0.003</b> | 0.005 | 0.005 |
| ppm Water | ppm | ASTM D6304  | >6000 | <b>38</b>    | 51.6  | 50    |

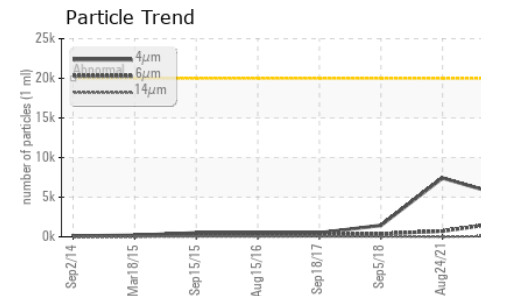
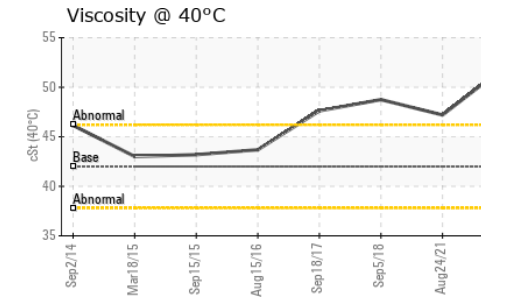
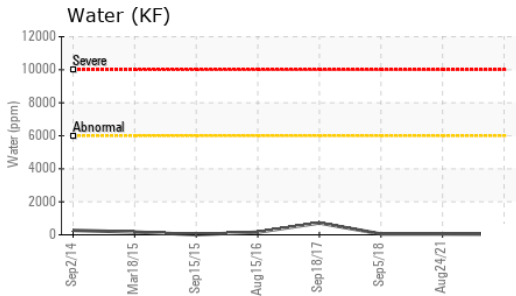
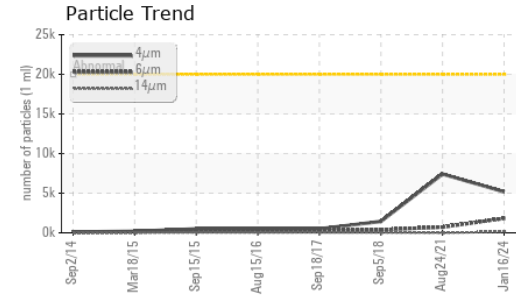
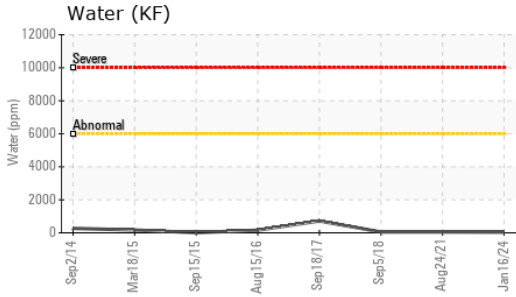
**FLUID CLEANLINESS**    method    limit/base    current    history1    history2

|                 |  |              |           |                 |          |          |
|-----------------|--|--------------|-----------|-----------------|----------|----------|
| Particles >4µm  |  | ASTM D7647   | >20000    | <b>5180</b>     | 7417     | 1440     |
| Particles >6µm  |  | ASTM D7647   | >2500     | <b>1815</b>     | 721      | 391      |
| Particles >14µm |  | ASTM D7647   | >320      | <b>131</b>      | 6        | 40       |
| Particles >21µm |  | ASTM D7647   | >80       | <b>27</b>       | 0        | 13       |
| Particles >38µm |  | ASTM D7647   | >20       | <b>1</b>        | 0        | 2        |
| Particles >71µm |  | ASTM D7647   | >4        | <b>1</b>        | 0        | 0        |
| Oil Cleanliness |  | ISO 4406 (c) | >21/18/15 | <b>20/18/14</b> | 20/17/10 | 18/16/12 |

**FLUID DEGRADATION**    method    limit/base    current    history1    history2

|                  |          |            |     |             |       |       |
|------------------|----------|------------|-----|-------------|-------|-------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | .10 | <b>0.27</b> | 0.460 | 0.538 |
|------------------|----------|------------|-----|-------------|-------|-------|

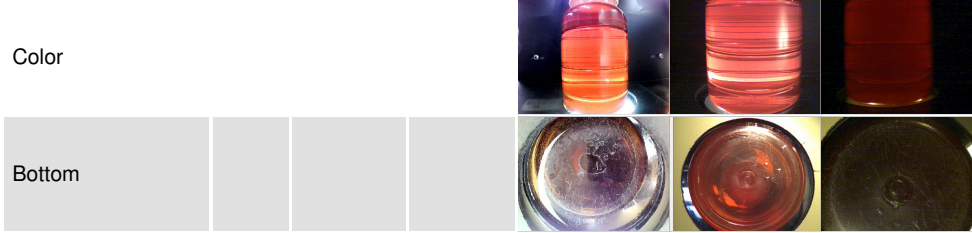
# OIL ANALYSIS REPORT



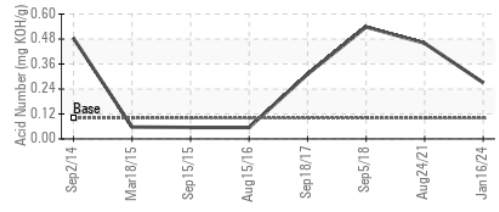
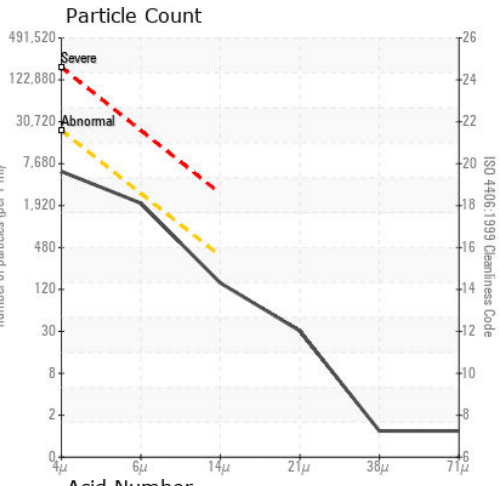
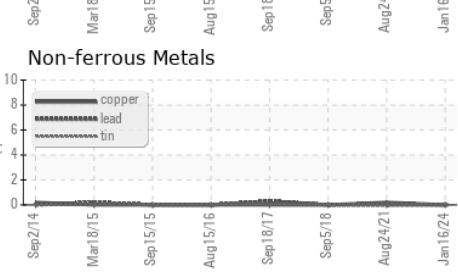
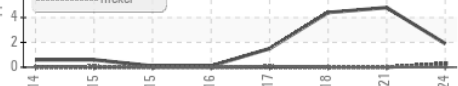
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| 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    | >0.6    | NEG      | NEG      |
| Free Water       | scalar | *Visual    |         | NEG      | NEG      |

| FLUID PROPERTIES | method | limit/base   | current | history1 | history2 |
|------------------|--------|--------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445 42 | 52.0    | 47.2     | 48.75    |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ST39289 **Received** : 17 Jan 2024  
**Lab Number** : 06063566 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10834948 **Diagnostician** : Don Baldridge  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**US ARMY CORP OF ENGINEERS**  
 1397 POWERHOUSE RD  
 SHORTERVILLE, AL  
 US 36373  
 Contact: JEFF MONEY  
 jeffery.w.money@usace.army.mil  
 T: (229)768-2635  
 F: x:

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)