



# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**(CGCTH)**  
Machine Id  
**[CGCTH] PIPER RL-2917-68A**  
Component  
**Right Piston Aircraft Engine**  
Fluid  
**SHELL AEROSHELL W 15W50 MGR (12 LTR)**

## 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.

### Fluid Condition

The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1 | history2 |
|---------------|-------------|-------------|--------------------|----------|----------|
| Sample Number | Client Info |             | <b>WC0834787</b>   | ---      | ---      |
| Sample Date   | Client Info |             | <b>01 Aug 2023</b> | ---      | ---      |
| TSN           | hrs         | Client Info | <b>606</b>         | ---      | ---      |
| TSO           | hrs         | Client Info | <b>606</b>         | ---      | ---      |
| Oil Age       | hrs         | Client Info | <b>0</b>           | ---      | ---      |
| Oil Changed   |             | Client Info | <b>Changed</b>     | ---      | ---      |
| Sample Status |             |             | <b>NORMAL</b>      | ---      | ---      |

## CONTAMINATION

|        | method    | limit/base | current        | history1 | history2 |
|--------|-----------|------------|----------------|----------|----------|
| Fuel   | WC Method | >4.0       | <b>&lt;1.0</b> | ---      | ---      |
| Glycol | WC Method |            | <b>NEG</b>     | ---      | ---      |

## WEAR METALS

|           | method | limit/base           | current     | history1 | history2 |
|-----------|--------|----------------------|-------------|----------|----------|
| Iron      | ppm    | ASTM D5185(m) >90    | <b>11</b>   | ---      | ---      |
| Chromium  | ppm    | ASTM D5185(m) >20    | <b>3</b>    | ---      | ---      |
| Nickel    | ppm    | ASTM D5185(m) >15    | <b>1</b>    | ---      | ---      |
| Titanium  | ppm    | ASTM D5185(m)        | <b>0</b>    | ---      | ---      |
| Silver    | ppm    | ASTM D5185(m) >5     | <b>0</b>    | ---      | ---      |
| Aluminum  | ppm    | ASTM D5185(m) >25    | <b>6</b>    | ---      | ---      |
| Lead      | ppm    | ASTM D5185(m) >20000 | <b>1666</b> | ---      | ---      |
| Copper    | ppm    | ASTM D5185(m) >25    | <b>4</b>    | ---      | ---      |
| Tin       | ppm    | ASTM D5185(m) >30    | <b>0</b>    | ---      | ---      |
| Antimony  | ppm    | ASTM D5185(m)        | <b>0</b>    | ---      | ---      |
| Vanadium  | ppm    | ASTM D5185(m)        | <b>0</b>    | ---      | ---      |
| Beryllium | ppm    | ASTM D5185(m)        | <b>0</b>    | ---      | ---      |
| Cadmium   | ppm    | ASTM D5185(m)        | <b>2</b>    | ---      | ---      |

## ADDITIVES

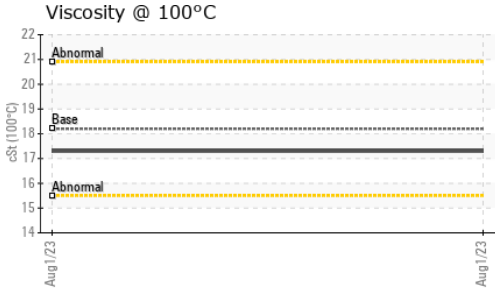
|            | method | limit/base         | current      | history1 | history2 |
|------------|--------|--------------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185(m)      | <b>&lt;1</b> | ---      | ---      |
| Barium     | ppm    | ASTM D5185(m)      | <b>0</b>     | ---      | ---      |
| Molybdenum | ppm    | ASTM D5185(m) 5    | <b>0</b>     | ---      | ---      |
| Manganese  | ppm    | ASTM D5185(m)      | <b>0</b>     | ---      | ---      |
| Magnesium  | ppm    | ASTM D5185(m) 10   | <b>21</b>    | ---      | ---      |
| Calcium    | ppm    | ASTM D5185(m) 10   | <b>6</b>     | ---      | ---      |
| Phosphorus | ppm    | ASTM D5185(m) 1280 | <b>724</b>   | ---      | ---      |
| Zinc       | ppm    | ASTM D5185(m) 10   | <b>4</b>     | ---      | ---      |
| Sulfur     | ppm    | ASTM D5185(m) 1800 | <b>925</b>   | ---      | ---      |
| Lithium    | ppm    | ASTM D5185(m)      | <b>&lt;1</b> | ---      | ---      |

## CONTAMINANTS

|           | method | limit/base        | current      | history1 | history2 |
|-----------|--------|-------------------|--------------|----------|----------|
| Silicon   | ppm    | ASTM D5185(m) >15 | <b>6</b>     | ---      | ---      |
| Sodium    | ppm    | ASTM D5185(m)     | <b>2</b>     | ---      | ---      |
| Potassium | ppm    | ASTM D5185(m) >20 | <b>&lt;1</b> | ---      | ---      |



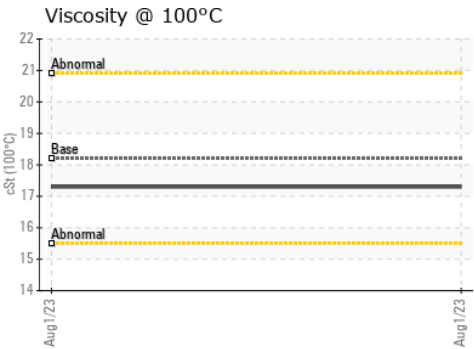
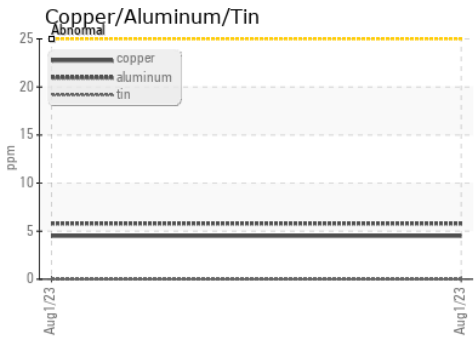
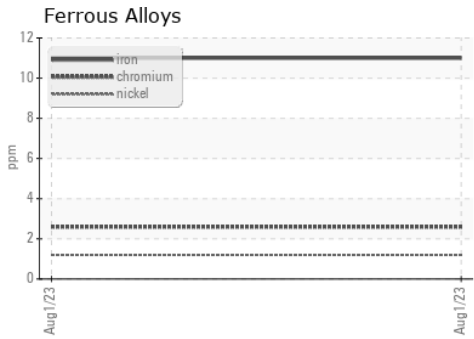
# OIL ANALYSIS REPORT



| VISUAL           | method | limit/base | current | history1     | history2 |     |
|------------------|--------|------------|---------|--------------|----------|-----|
| White Metal      | scalar | Visual*    | NONE    | <b>NONE</b>  | ---      | --- |
| Yellow Metal     | scalar | Visual*    | NONE    | <b>NONE</b>  | ---      | --- |
| Precipitate      | scalar | Visual*    | NONE    | <b>NONE</b>  | ---      | --- |
| Silt             | scalar | Visual*    | NONE    | <b>NONE</b>  | ---      | --- |
| Debris           | scalar | Visual*    | NONE    | <b>VLITE</b> | ---      | --- |
| Sand/Dirt        | scalar | Visual*    | NONE    | <b>NONE</b>  | ---      | --- |
| Appearance       | scalar | Visual*    | NORML   | <b>NORML</b> | ---      | --- |
| Odor             | scalar | Visual*    | NORML   | <b>NORML</b> | ---      | --- |
| Emulsified Water | scalar | Visual*    | >0.1    | <b>NEG</b>   | ---      | --- |
| Free Water       | scalar | Visual*    |         | <b>NEG</b>   | ---      | --- |

| FLUID PROPERTIES | method | limit/base    | current | history1    | history2 |     |
|------------------|--------|---------------|---------|-------------|----------|-----|
| Visc @ 100°C     | cSt    | ASTM D7279(m) | 18.2    | <b>17.3</b> | ---      | --- |

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0834787 **Received** : 30 Aug 2023  
**Lab Number** : **02579335** **Diagnosed** : 30 Aug 2023  
**Unique Number** : 5632395 **Diagnostician** : Kevin Marson  
**Test Package** : AVI 1

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To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.