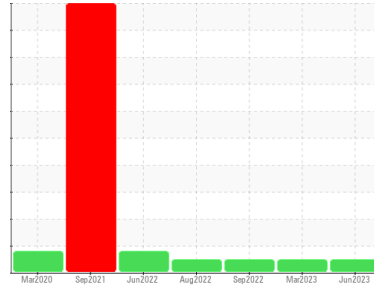




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
(C-FYWQ)
 Machine Id
[C-FYWQ] BEECHCRAFT DUKE B60 L105859
 Component
Right Piston Aircraft Engine
 Fluid
AVIATION ENGINE OIL SAE 50 (13 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AVIATION ENGINE OIL SAE 50. Please confirm.

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 | WC | WC0766755 | WC0720989 |
| Sample Date | Client Info | 06 Jun 2023 | 27 Mar 2023 | 19 Sep 2022 |
| TSN | hrs Client Info | 0 | 0 | 0 |
| TSO | hrs Client Info | 0 | 851 | 0 |
| Oil Age | hrs Client Info | 0 | 36 | 50 |
| Oil Changed | Client Info | N/A | Changed | Changed |
| Sample Status | | NORMAL | NORMAL | NORMAL |

CONTAMINATION

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

WEAR METALS

| method | limit/base | current | history1 | history2 |
|-----------|--------------------------|--------------|----------|----------|
| Iron | ppm ASTM D5185(m) >90 | 22 | 27 | 40 |
| Chromium | ppm ASTM D5185(m) >20 | 8 | 9 | 14 |
| Nickel | ppm ASTM D5185(m) >15 | 3 | 3 | 5 |
| Titanium | ppm ASTM D5185(m) | 0 | 0 | <1 |
| Silver | ppm ASTM D5185(m) >5 | <1 | <1 | <1 |
| Aluminum | ppm ASTM D5185(m) >25 | 13 | 15 | 18 |
| Lead | ppm ASTM D5185(m) >20000 | 3714 | 4923 | 4709 |
| Copper | ppm ASTM D5185(m) >25 | 16 | 17 | 25 |
| Tin | ppm ASTM D5185(m) >30 | <1 | 0 | <1 |
| Antimony | ppm ASTM D5185(m) | 0 | 0 | 0 |
| Vanadium | ppm ASTM D5185(m) | 0 | 0 | 0 |
| Beryllium | ppm ASTM D5185(m) | 0 | 0 | 0 |
| Cadmium | ppm ASTM D5185(m) | 1 | 2 | 3 |

ADDITIVES

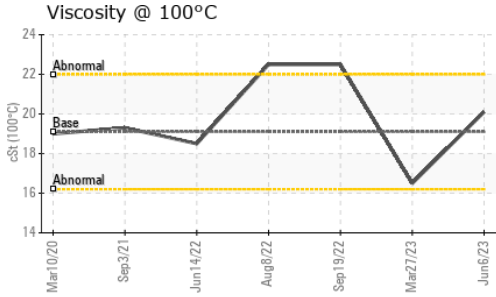
| method | limit/base | current | history1 | history2 |
|------------|------------------------|--------------|----------|----------|
| Boron | ppm ASTM D5185(m) 5 | 0 | <1 | <1 |
| Barium | ppm ASTM D5185(m) 5 | 0 | 0 | 0 |
| Molybdenum | ppm ASTM D5185(m) 12 | 0 | <1 | 0 |
| Manganese | ppm ASTM D5185(m) | 0 | 0 | 0 |
| Magnesium | ppm ASTM D5185(m) 5 | 5 | 15 | 9 |
| Calcium | ppm ASTM D5185(m) 5 | 2 | 2 | 33 |
| Phosphorus | ppm ASTM D5185(m) 1000 | 300 | 1284 | 1176 |
| Zinc | ppm ASTM D5185(m) 12 | 3 | 3 | 3 |
| Sulfur | ppm ASTM D5185(m) 3500 | 3049 | 2113 | 2504 |
| Lithium | ppm ASTM D5185(m) | <1 | <1 | <1 |

CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|-----------|-----------------------|--------------|----------|----------|
| Silicon | ppm ASTM D5185(m) >15 | 6 | 8 | 5 |
| Sodium | ppm ASTM D5185(m) | <1 | <1 | 1 |
| Potassium | ppm ASTM D5185(m) >20 | <1 | 0 | <1 |



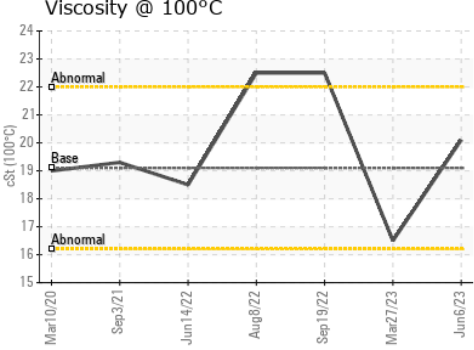
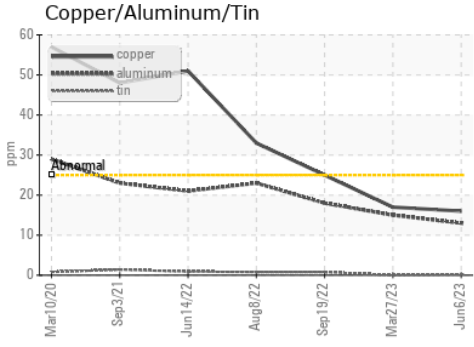
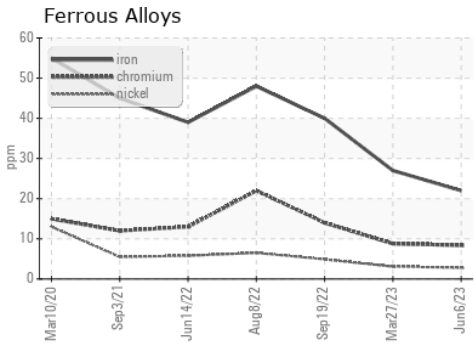
OIL ANALYSIS REPORT



| 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 | VLITE | 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* | >0.1 | NEG | NEG |
| Free Water | scalar | Visual* | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 | |
|------------------|--------|---------------|---------|-------------|----------|------|
| Visc @ 100°C | cSt | ASTM D7279(m) | 19.1 | 20.1 | 16.5 | 22.5 |

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC
Lab Number : 02577456
Unique Number : 5630516
Test Package : AVI 1

ITPS Canada
 2465 Aviation Lane., Unit 1
 London, ON
 CA N5V 3Z9
 Contact: Shannon Hickey
 shannon.hickey@itpscanada.com

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.

T:
F: