



OIL ANALYSIS REPORT

| | |
|-----------------|---------------|
| WEAR | NORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |

Area
(C-GUGB)
Machine Id
[C-GUGB] CESSNA 172S L-30988-51A
Component
Front Piston Aircraft Engine
Fluid
SHELL AEROSHELL W 15W50 MGR (8 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | WC0743824 | WC0743833 | WC0858920 |
| Sample Date | | Client Info | | 06 May 2024 | 10 Apr 2024 | 15 Mar 2024 |
| TSN | hrs | Client Info | | 0 | 0 | 0 |
| TSO | hrs | Client Info | | 3150 | 3111 | 3062 |
| Oil Age | hrs | Client Info | | 39 | 49 | 48 |
| Filter Age | hrs | Client Info | | 39 | 49 | 48 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|---------------|--------|-------------|------|------|
| Iron | ppm | ASTM D5185(m) | >90 | 12 | 14 | 14 |
| Chromium | ppm | ASTM D5185(m) | >20 | 1 | 2 | 2 |
| Nickel | ppm | ASTM D5185(m) | >15 | 2 | 3 | 3 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | >5 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >25 | 4 | 3 | 3 |
| Lead | ppm | ASTM D5185(m) | >20000 | 3640 | 3514 | 4267 |
| Copper | ppm | ASTM D5185(m) | >25 | 7 | 7 | 7 |
| Tin | ppm | ASTM D5185(m) | >30 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| White Metal | scalar | Visual* | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE | NONE |

CONTAMINATION

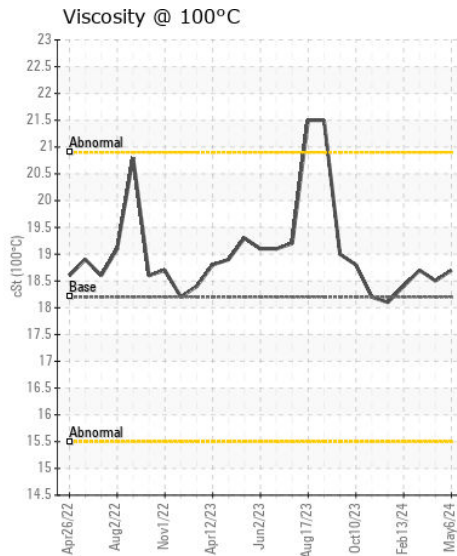
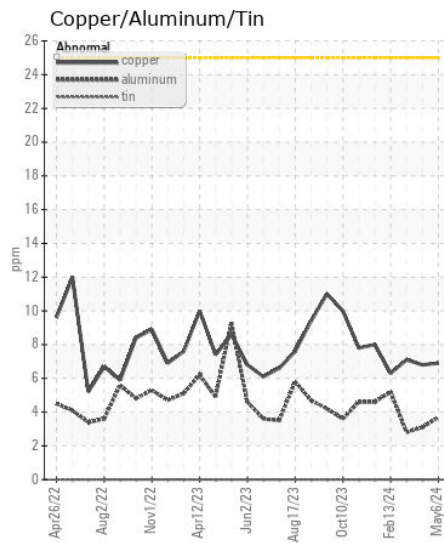
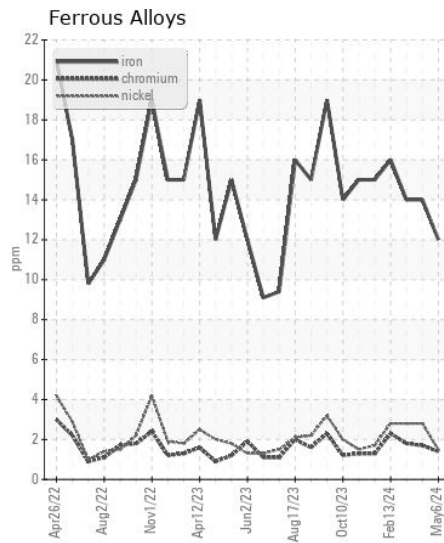
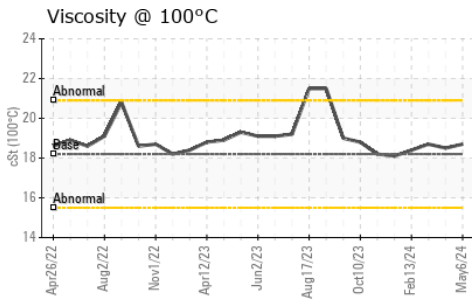
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|---------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185(m) | >15 | 8 | 4 | 4 |
| Potassium | ppm | ASTM D5185(m) | >20 | 0 | 0 | 0 |
| Fuel | | WC Method | >4.0 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Silt | scalar | Visual* | NONE | VLITE | VLITE | NONE |
| Debris | scalar | Visual* | NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar | Visual* | NONE | NONE | NONE | NONE |
| Appearance | scalar | Visual* | NORML | NORML | NORML | NORML |
| Odor | scalar | Visual* | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | Visual* | >0.1 | NEG | NEG | NEG |

FLUID CONDITION

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

| | | | | | | |
|--------------|-----|---------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |
| Boron | ppm | ASTM D5185(m) | | <1 | <1 | 0 |
| Barium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 5 | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) | 10 | <1 | <1 | 1 |
| Calcium | ppm | ASTM D5185(m) | 10 | <1 | <1 | 2 |
| Phosphorus | ppm | ASTM D5185(m) | 1280 | 1101 | 1110 | 1150 |
| Zinc | ppm | ASTM D5185(m) | 10 | 5 | 4 | 6 |
| Sulfur | ppm | ASTM D5185(m) | 1800 | 1355 | 1334 | 1386 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 18.2 | 18.7 | 18.5 | 18.7 |



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0743824
Lab Number : 02637458
Unique Number : 5786620
Test Package : AVI 1

Received : 24 May 2024
Tested : 24 May 2024
Diagnosed : 24 May 2024 - Kevin Marson

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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.