



OIL ANALYSIS REPORT

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

Area
(C-GEPV) CPAQ.AERO
Machine Id
[C-GEPV] DIAMOND DA20-C1 806714
Component
Front Piston Aircraft Engine
Fluid
SHELL AEROSHELL W 15W50 MGR (6 LTR)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend that you drain the oil from the component if this has not already been done. We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

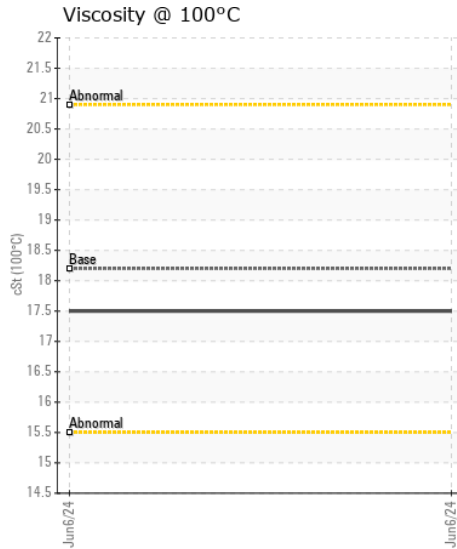
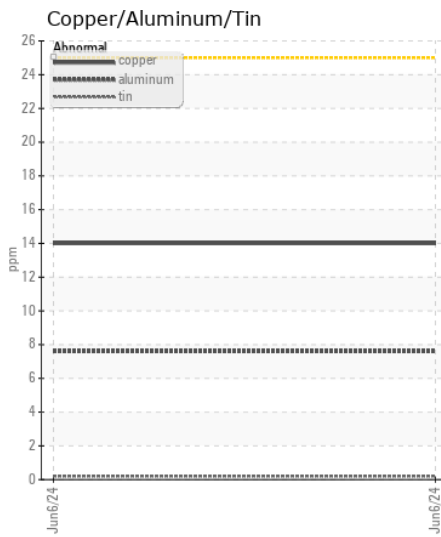
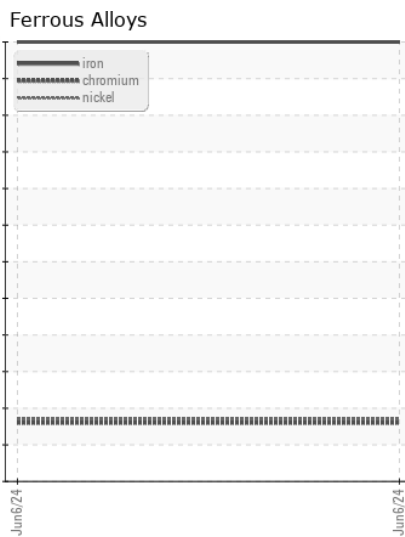
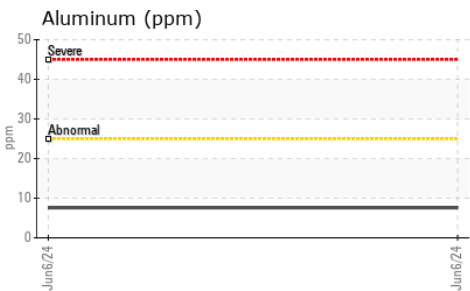
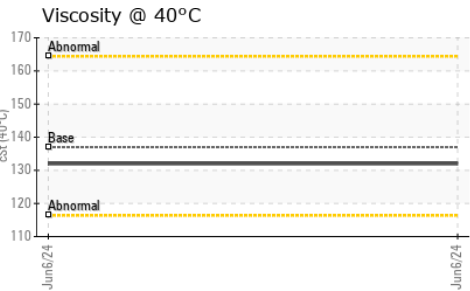
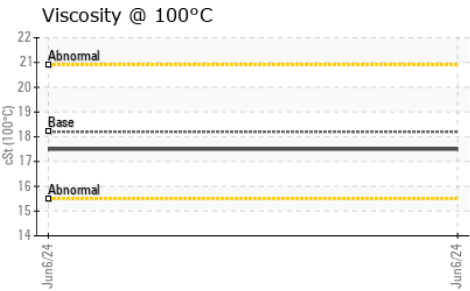
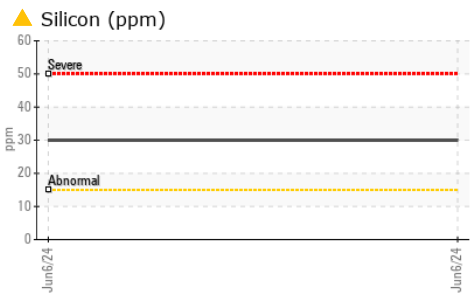
CONTAMINATION

There is a moderate concentration of dirt present in the oil.

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------------|--------|---------------|-----------|-------------|----------|----------|
| Sample Number | | Client Info | | WC0821899 | --- | --- |
| Sample Date | | Client Info | | 06 Jun 2024 | --- | --- |
| TSN | hrs | Client Info | | 0 | --- | --- |
| TSO | hrs | Client Info | | 645 | --- | --- |
| Oil Age | hrs | Client Info | | 44 | --- | --- |
| Filter Age | hrs | Client Info | | 44 | --- | --- |
| Oil Changed | | Client Info | | N/A | --- | --- |
| Filter Changed | | Client Info | | N/A | --- | --- |
| Sample Status | | | | ABNORMAL | --- | --- |
| Iron | ppm | ASTM D5185(m) | >90 | 12 | --- | --- |
| Chromium | ppm | ASTM D5185(m) | >20 | 2 | --- | --- |
| Nickel | ppm | ASTM D5185(m) | >15 | 2 | --- | --- |
| Titanium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Silver | ppm | ASTM D5185(m) | >5 | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185(m) | >25 | 8 | --- | --- |
| Lead | ppm | ASTM D5185(m) | >20000 | 4844 | --- | --- |
| Copper | ppm | ASTM D5185(m) | >25 | 14 | --- | --- |
| Tin | ppm | ASTM D5185(m) | >30 | <1 | --- | --- |
| Vanadium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| White Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Yellow Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Silicon | ppm | ASTM D5185(m) | >15 | ▲ 30 | --- | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | 0 | --- | --- |
| Fuel | | WC Method | >4.0 | <1.0 | --- | --- |
| Water | | WC Method | >0.1 | NEG | --- | --- |
| Glycol | | WC Method | | NEG | --- | --- |
| Silt | scalar | Visual* | NONE | NONE | --- | --- |
| Debris | scalar | Visual* | NONE | NONE | --- | --- |
| Sand/Dirt | scalar | Visual* | NONE | NONE | --- | --- |
| Appearance | scalar | Visual* | NORML | NORML | --- | --- |
| Odor | scalar | Visual* | NORML | NORML | --- | --- |
| Emulsified Water | scalar | Visual* | >0.1 | NEG | --- | --- |
| Sodium | ppm | ASTM D5185(m) | | 1 | --- | --- |
| Boron | ppm | ASTM D5185(m) | | <1 | --- | --- |
| Barium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185(m) | 5 | <1 | --- | --- |
| Manganese | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Magnesium | ppm | ASTM D5185(m) | 10 | <1 | --- | --- |
| Calcium | ppm | ASTM D5185(m) | 10 | 2 | --- | --- |
| Phosphorus | ppm | ASTM D5185(m) | 1280 | 1125 | --- | --- |
| Zinc | ppm | ASTM D5185(m) | 10 | 15 | --- | --- |
| Sulfur | ppm | ASTM D5185(m) | 1800 | 1343 | --- | --- |
| Visc @ 40°C | cSt | ASTM D7279(m) | 137 | 132 | --- | --- |
| Visc @ 100°C | cSt | ASTM D7279(m) | 18.2 | 17.5 | --- | --- |
| Viscosity Index (VI) | Scale | ASTM D2270* | 148 | 146 | --- | --- |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0821899 **Received** : 12 Jun 2024
Lab Number : 02641387 **Tested** : 13 Jun 2024
Unique Number : 5798926 **Diagnosed** : 13 Jun 2024 - Kevin Marson
Test Package : AVI 1 (Additional Tests: FT-IR, KV40, VI)

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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.