



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(C-GDBX) AKELA AIRCRAFT INC
Machine Id
[C-GDBX] DE HAVILLAND DHC-2 BEAVER 19366
Component
Piston Aircraft Engine
Fluid
PHILLIPS 66 AVIATION X/C OIL SAE20W50 (5 GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0346960	---	---
Sample Date		Client Info		01 Mar 2023	---	---
TSN	hrs	Client Info		0	---	---
TSO	hrs	Client Info		150	---	---
Oil Age	hrs	Client Info		50	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

Aluminum and chromium ppm levels are abnormal. Cylinder wear is indicated.

Iron	ppm	ASTM D5185(m)	>80	44	---	---
Chromium	ppm	ASTM D5185(m)	>40	▲ 130	---	---
Nickel	ppm	ASTM D5185(m)	>15	1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>5	0	---	---
Aluminum	ppm	ASTM D5185(m)	>25	▲ 37	---	---
Lead	ppm	ASTM D5185(m)	>20000	3755	---	---
Copper	ppm	ASTM D5185(m)	>25	10	---	---
Tin	ppm	ASTM D5185(m)	>30	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

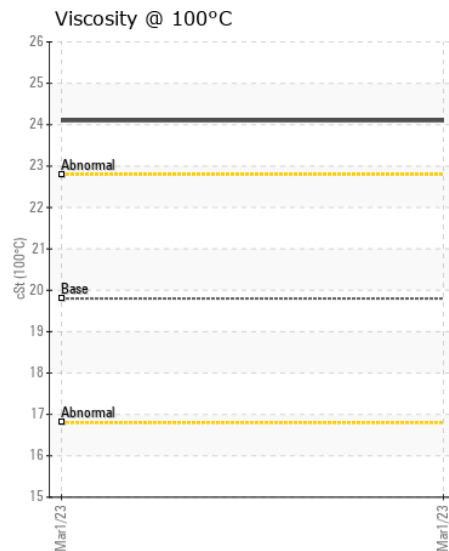
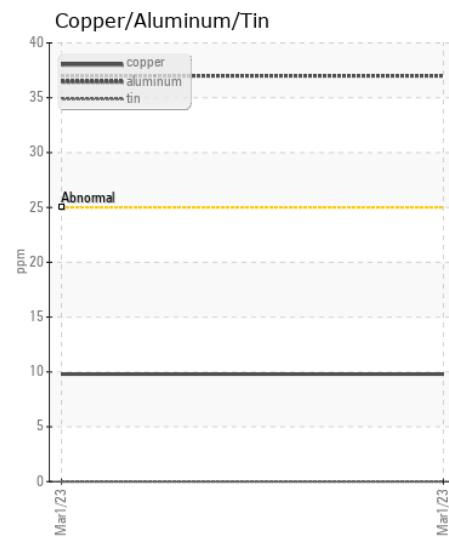
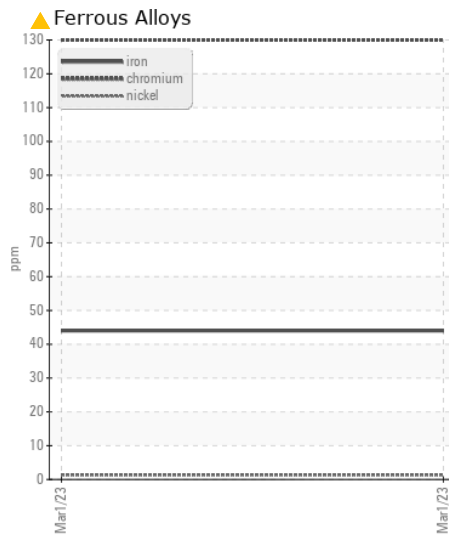
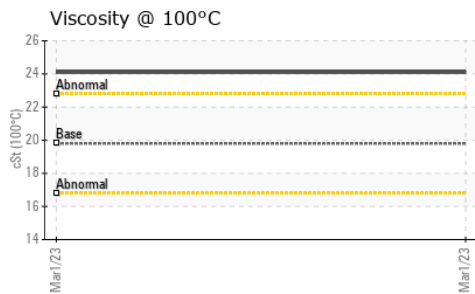
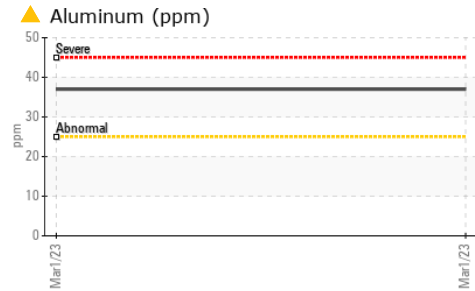
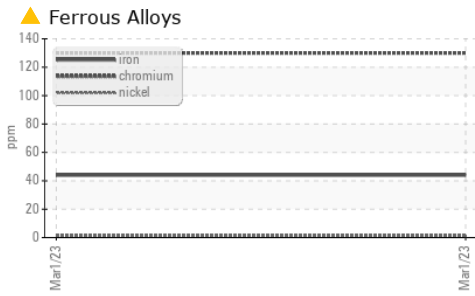
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	11	---	---
Potassium	ppm	ASTM D5185(m)	>20	1	---	---
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	---	---

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 60 range, advise investigate. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)		<1	---	---
Boron	ppm	ASTM D5185(m)		<1	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		0	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)		3	---	---
Calcium	ppm	ASTM D5185(m)		2	---	---
Phosphorus	ppm	ASTM D5185(m)		3	---	---
Zinc	ppm	ASTM D5185(m)		6	---	---
Sulfur	ppm	ASTM D5185(m)		1358	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	19.8	24.1	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0346960
Lab Number : 02546249
Unique Number : 5551259
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.